

## IceCube M&amp;O Staffing Matrix sort by Institutions v10.0 2011.0422

| Institution           | Labor Cat.    | Names  | Tasks  | 2.1 Program Management | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total |      |
|-----------------------|---------------|--|--|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|-------------|------|
| ALBERTA               | KE            | GRANT, DARREN  | Maintenance of IceCube-Photonics interface<br>TFT Board member<br>WestGrid computing   |                        |                                       |                                   | 0.10                         | 0.10  | 0.10        |      |
|                       | KE Total      |  |  |                        |                                       | 0.10                              | 0.10                         | 0.10  | 0.30        |      |
|                       | GR            | WOOD, TANIA  | WestGrid computing   |                        |                                       | 0.20                              |                              |   | 0.20        |      |
|                       | GR Total      |  |  |                        |                                       | 0.20                              |                              |   | 0.20        |      |
| <b>ALBERTA Total</b>  |               |  |  |                        |                                       | <b>0.30</b>                       | <b>0.10</b>                  | <b>0.10</b>   | <b>0.50</b> |      |
| BARBADOS              | KE            | SEUNARINE, SURUJ   | Analysis of flasher runs for inice calibration of saturation, and flasher and Standard Candle runs for absolute energy calibration for cascades.<br>Work on cascade filter |                        |                                       |                                   | 0.15                         | 0.15  | 0.15        |      |
|                       | KE Total      |  |  |                        |                                       |                                   | 0.15                         | 0.15  | 0.30        |      |
| <b>BARBADOS Total</b> |               |  |  |                        |                                       |                                   | <b>0.15</b>                  | <b>0.15</b>   | <b>0.30</b> |      |
| BOCHUM                | KE            | BECKER, JULIA  | Pubcom member<br>Update MMC from Java to C++   | 0.10                   |                                       |                                   |                              |   | 0.10        |      |
|                       | KE Total      |  |  | 0.10                   |                                       |                                   |                              |   | 0.20        |      |
|                       | GR            | OLIVO, MARTINO   | Monte Carlo Validation   |                        |                                       |                                   |                              |   | 0.10        |      |
|                       | GR Total      | UBOCHUM GR   | Detector Monitoring  |                        | 0.03                                  |                                   |                              |   | 0.03        |      |
| <b>BOCHUM Total</b>   |               |  |  | <b>0.10</b>            | <b>0.03</b>                           |                                   |                              | <b>0.20</b>   | <b>0.33</b> |      |
| BONN                  | KE            | KOWALSKI, MAREK  | Cascade WG Co-Chair<br>TFT Board member  |                        |                                       |                                   | 0.25                         |   | 0.25        |      |
|                       | KE Total      |  |  |                        |                                       |                                   | 0.10                         |   | 0.10        |      |
|                       | PO            | BOSSER, SEBASTIAN  | Run Coordinator<br>TFT Board member  |                        | 0.50                                  |                                   |                              |   | 0.50        |      |
|                       | PO Total      |  |  |                        | 0.50                                  |                                   | 0.10                         |   | 0.60        |      |
|                       | GR            | FRANCKOWIAK, ANNA  | Alert System for follow-up   |                        |                                       |                                   |                              | 0.10  |             | 0.10 |
|                       |               | HOMRIER, ANDREAS   | Alert System for follow-up   |                        |                                       |                                   |                              | 0.10  |             | 0.10 |
|                       |               | PANKNIN, SEBASTIAN   | IC-40 L3 processing  |                        |                                       |                                   |                              |   | 0.20        | 0.20 |
|                       |               | UBONN GR   | Detector Monitoring<br>Reconstruction/ Analysis tools  |                        | 0.03                                  |                                   |                              |   |             | 0.03 |
| GR Total              |               |  |  | 0.03                   |                                       | 0.20                              | 0.40                         | 0.63  |             |      |
| <b>BONN Total</b>     |               |  |  | <b>0.53</b>            | <b>0.65</b>                           |                                   | <b>0.40</b>                  | <b>1.58</b>   |             |      |
| CAU                   | KE            | JAPARIDZE, GEORGE  | Monitoring shifts  |                        |                                       |                                   | 0.02                         |   | 0.02        |      |
|                       | KE Total      |  |  |                        |                                       |                                   | 0.02                         |   | 0.02        |      |
| <b>CAU Total</b>      |               |  |  |                        |                                       |                                   | <b>0.02</b>                  | <b>0.02</b>   |             |      |
| CHIBA                 | KE            | YOSHIDA, SHIGERU   | Maintain Romeo, EHE Simulations, Calibration using Standard Candles  |                        |                                       |                                   |                              | 0.20  | 0.20        |      |
|                       | KE Total      |  |  |                        |                                       |                                   |                              | 0.20  | 0.20        |      |
|                       | SC            | ISHIHARA, AYA  | EHE and Brights WG co-chair<br>EHE Filters   |                        |                                       |                                   |                              | 0.25  |             | 0.25 |
|                       |               | KEIICHI MASE   | Maintain Romeo, EHE Simulations, Maintain reconstruction projects (Portia), MC/Data comparison for EHE-filtered and IceTop events, Standard Candle Analysis                |                        |                                       |                                   |                              | 0.15  |             | 0.15 |
|                       | SC Total      |  |  |                        |                                       |                                   | 0.40                         | 0.20  | 0.60        |      |
|                       | GR            | CHIBA GR   | Detector Monitoring<br>Improve the Ice Model, Afterpulse Simulator, Standard Candle Analysis, Maintain reconstruction projects (Ophelia, ehe-star)                         |                        | 0.03                                  |                                   |                              |   | 0.20        | 0.23 |
|                       | GR Total      |  |  |                        | 0.03                                  |                                   |                              | 0.20  | 0.23        |      |
| <b>CHIBA Total</b>    |               |  |  |                        | <b>0.03</b>                           |                                   | <b>0.40</b>                  | <b>0.60</b>   | <b>1.03</b> |      |
| DESY                  | KE            | NAHNHAUER, ROLF  | Acoustic R&D Support   | 0.10                   |                                       |                                   |                              |   | 0.10        |      |
|                       |               | SPIERING, CHRISTIAN  | ExecCom member   | 0.20                   |                                       |                                   |                              |   | 0.20        |      |
|                       |               | WALTER, MICHAEL  | Simulation Production Cluster  |                        |                                       | 0.20                              |                              |   | 0.20        |      |
|                       | KE Total      |  |  | 0.30                   |                                       | 0.20                              |                              |   | 0.50        |      |
|                       | SC            | BENABDERRAHMANE, LOFTI   | Deputy Monitoring Coordinator  |                        | 0.20                                  |                                   |                              |   |             | 0.20 |
|                       |               | BERGMANN, JENS   | Simulation Production Cluster  |                        |                                       | 0.25                              |                              |   |             | 0.25 |
|                       |               | DESY SC  | Detector Monitoring  |                        |                                       | 0.06                              |                              |   |             | 0.06 |
|                       |               | SULANKE, K.-H.   | DAQ Firmware Support   |                        |                                       | 0.15                              |                              |   |             | 0.15 |
|                       | SC Total      |  |  |                        | 0.41                                  | 0.25                              |                              |   | 0.66        |      |
|                       | GR            | ACHIM STOESSL  | Flasher Analysis   |                        | 0.20                                  |                                   |                              |   |             | 0.20 |
|                       |               | DESY GR  | Detector Monitoring<br>Simulation Production Cluster   |                        | 0.12                                  |                                   | 0.15                         |   |             | 0.12 |
|                       |               | EIKE MIDDELL   | Flasher Analysis   |                        | 0.10                                  |                                   |                              |   |             | 0.10 |
|                       |               | FRANKE, ROBERT   | Online Filter for Alerts<br>Rate Data Bank South Pole  |                        |                                       |                                   |                              | 0.10  |             | 0.10 |
|                       |               |  |  |                        |                                       |                                   |                              | 0.10  |             | 0.10 |
| KISLAT, FABIAN        |               | Reconstruction Coordinator (acting), Maintain Reconstruction Framework |  |                        |                                       | 0.15                              |                              |   | 0.15        |      |
| GR Total              | MIDDELL, EIKE | Cascade Reconstruction   |  | 0.42                   | 0.30                                  | 0.20                              | 0.30                         | 1.22  |             |      |
| AD                    | DESY AD       | Host Fall Collaboration Meeting  | 0.00   |                        |                                       |                                   |                              | 0.00  |             |      |
| AD Total              |               |  | 0.00   |                        |                                       |                                   |                              | 0.00  |             |      |
| TE                    | DESY TE       | European Data Center -Distributed Computing and Labor                  |  |                        |                                       | 2.00                              |                              | 2.00  |             |      |
| TE Total              |               |  |  |                        |                                       | 2.00                              |                              | 2.00  |             |      |
| <b>DESY Total</b>     |               |  |  | <b>0.30</b>            | <b>0.83</b>                           | <b>2.75</b>                       | <b>0.20</b>                  | <b>0.30</b>   | <b>4.38</b> |      |
| DTMND                 | SC            | PIELOTH, DAMIAN  | Coordinate GRID computing in Germany   |                        |                                       |                                   | 0.25                         |   | 0.25        |      |
|                       | SC Total      |  |  |                        |                                       |                                   | 0.25                         |   | 0.25        |      |
|                       | GR            | DTMD GR  | Detector Monitoring<br>Simulation Production   |                        | 0.03                                  |                                   | 0.40                         |   | 0.03        |      |
|                       |               | MILKE, NATALIE   | Simulation Programs: noise-generator   |                        |                                       |                                   |                              |   | 0.20        |      |
| GR Total              |               |  |  | 0.03                   | 0.40                                  |                                   | 0.20                         | 0.63  |             |      |
| <b>DTMND Total</b>    |               |  |  | <b>0.03</b>            | <b>0.65</b>                           |                                   | <b>0.20</b>                  | <b>0.88</b>   |             |      |

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|-----------------------|------------------------|---|--|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|-------------|
| EPFL                  | KE                     | EPFL KE   | Acoustic R&D Support   | 0.10                   |                                       |                                   |                              |   | 0.10        |
|                       | KE Total               |   |  | 0.10                   |                                       |                                   |                              |   | 0.10        |
|                       | SC                     | EPFL SC   | SLF, Low Energy, Energy reconstruction (development)   |                        |                                       |                                   |                              | 0.25  | 0.25        |
|                       | SC Total               |   |  |                        |                                       |                                   |                              | 0.25  | 0.25        |
|                       | GR                     | EPFL GR   | Detector Monitoring  |                        | 0.03                                  |                                   |                              |   | 0.03        |
| GR Total              |                        |   |  | 0.03                   |                                       |                                   |                              | 0.03  |             |
| <b>EPFL Total</b>     |                        |   |  | <b>0.10</b>            | <b>0.03</b>                           |                                   |                              | <b>0.25</b>   | <b>0.38</b> |
| GENT                  | SC                     | UGENT SC  | Acoustic R&D Support<br>Support IceTop Simulations, IceTop Calibrations,<br>IceTop Reconstruction                        | 0.05                   |                                       |                                   |                              | 0.10  | 0.10        |
|                       | SC Total               |   |  | 0.05                   |                                       |                                   |                              | 0.10  | 0.15        |
|                       | GR                     | UGENT GR  | Acoustic R&D Support<br>Detector Monitoring<br>Support IceTop Simulations, IceTop Calibrations,<br>IceTop Reconstruction | 0.05                   | 0.03                                  |                                   |                              |   | 0.05        |
|                       | GR Total               |   |  | 0.05                   | 0.03                                  |                                   |                              | 0.40  | 0.48        |
| <b>GENT Total</b>     |                        |   |  | <b>0.10</b>            | <b>0.03</b>                           |                                   |                              | <b>0.50</b>   | <b>0.63</b> |
| GTECH                 | KE                     | TABOADA, IGNACIO  | Speakers Comm Chair<br>TFT Board Chair   | 0.25                   |                                       |                                   |                              | 0.25  | 0.25        |
|                       | KE Total               |   |  | 0.25                   |                                       |                                   |                              | 0.25  | 0.50        |
|                       | PO                     | TEPE, ANDREAS   | Simulation Production  |                        |                                       | 0.20                              |                              |   | 0.20        |
|                       | PO Total               |   |  |                        |                                       | 0.20                              |                              |   | 0.20        |
|                       | GR                     | DAUGHHETEE, JACOB   | Standard Candle Vertex and Energy Calibration  |                        | 0.20                                  |                                   |                              |   | 0.20        |
|                       | GR Total               |   |  |                        | 0.03                                  |                                   |                              |   | 0.03        |
| GTECH GR              |                        |   |  |                        |                                       |                                   |                              | 0.23  |             |
| <b>GTECH Total</b>    |                        |   |  | <b>0.25</b>            | <b>0.23</b>                           | <b>0.20</b>                       | <b>0.25</b>                  |   | <b>0.93</b> |
| HUMBOLDT              | KE                     | HUMB KE   | Reconstruction/ Analysis tools   |                        |                                       |                                   |                              | 0.10  | 0.10        |
|                       | KE Total               |   |  |                        |                                       |                                   |                              | 0.25  | 0.25        |
|                       | GR                     | KOLANOSKI, HERMANN  | CR-WG Co Chair   |                        |                                       |                                   |                              | 0.10  | 0.10        |
|                       | GR Total               |   |  |                        |                                       |                                   |                              | 0.25  | 0.35        |
|                       | GR                     | HUMB GR   | Detector Monitoring  |                        | 0.03                                  |                                   |                              |   | 0.03        |
| GR Total              |                        |   |  |                        |                                       |                                   | 0.25                         | 0.25  |             |
| KISLET, FABIAN        |                        |   |  |                        |                                       |                                   |                              | 0.25  |             |
| <b>HUMBOLDT Total</b> |                        |   |  | <b>0.03</b>            |                                       |                                   | <b>0.25</b>                  | <b>0.35</b>   | <b>0.63</b> |
| KU                    | KE                     | BESSION, DAVE   | EMI - Radio R&D<br>Monitoring shifts   | 0.10                   | 0.02                                  |                                   |                              |   | 0.10        |
|                       | KE Total               |   |  | 0.10                   | 0.02                                  |                                   |                              |   | 0.12        |
| <b>KU Total</b>       |                        |   |  | <b>0.10</b>            | <b>0.02</b>                           |                                   |                              |   | <b>0.12</b> |
| LBNL                  | KE                     | KIRYLUK, JOANNA   | Cascade WG Co Chair  |                        |                                       |                                   | 0.25                         |   | 0.25        |
|                       | KE Total               |   |  |                        |                                       |                                   | 0.25                         |   | 0.25        |
|                       | SC                     | KLEIN, SPENCER  | Diffuse WG Co-chair of<br>Pubcom member<br>Supervise LBNL effort   | 0.10                   |                                       |                                   |                              |   | 0.10        |
|                       | SC Total               |   |  | 0.05                   |                                       |                                   |                              |   | 0.05        |
|                       | GR                     | NYGREN, DAVID R   | Track Engine Trigger   |                        | 0.10                                  |                                   |                              |   | 0.10        |
|                       | KE Total               |   |  | 0.15                   | 0.10                                  |                                   | 0.50                         |   | 0.75        |
|                       | SC                     | KIRYLUK, JOANNA   | BadDomList<br>Flasher Runs<br>Simulation Production on PDSF  |                        | 0.20                                  |                                   |                              |   | 0.20        |
|                       | SC Total               |   |  |                        | 0.10                                  |                                   |                              |   | 0.10        |
|                       | PO                     | GERHARDT, LISA  | Simulation Programs: cmc   |                        |                                       |                                   | 0.20                         |   | 0.20        |
|                       | PO Total               |   |  |                        |                                       |                                   | 0.35                         |   | 0.35        |
| PO                    | LBNL PO                | DOM simulator & calibrator<br>Monitoring shifts                 |  | 0.09                   |                                       |                                   |                              | 0.09  |             |
| PO Total              |                        |   |  | 0.09                   |                                       |                                   |                              | 0.55  |             |
| EN                    | STEZELBERGER, THORSTEN | Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)              |  | 0.15                   |                                       |                                   |                              | 0.15  |             |
| EN Total              |                        |   |  | 0.15                   |                                       |                                   |                              | 0.15  |             |
| <b>LBNL Total</b>     |                        |   |  | <b>0.15</b>            | <b>0.64</b>                           | <b>0.20</b>                       | <b>0.50</b>                  | <b>0.55</b>   | <b>2.04</b> |
| MAINZ                 | KE                     | KÖPKE, LUTZ   | ExecCom member   | 0.20                   |                                       |                                   |                              |   | 0.20        |
|                       | KE Total               |   |  | 0.20                   |                                       |                                   |                              |   | 0.20        |
|                       | SC                     | AHRENS, JENS  | Simulation Production  |                        |                                       | 0.15                              |                              |   | 0.15        |
|                       | SC Total               |   |  |                        |                                       | 0.15                              |                              |   | 0.15        |
|                       | GR                     | KROLL, GÖSTA  | SuperNova Operations   |                        | 0.50                                  |                                   |                              |   | 0.50        |
|                       | GR Total               |   |  |                        | 0.10                                  |                                   |                              |   | 0.10        |
|                       | GR                     | SCHATTO, KAI  | Monitoring IceCube Live integration<br>Reconstruction Tools  |                        |                                       |                                   |                              | 0.30  | 0.30        |
|                       | GR Total               |   |  |                        | 0.05                                  |                                   |                              |   | 0.05        |
| UM GR                 |                        | Detector Monitoring   |  | 0.05                   |                                       |                                   |                              | 0.05  |             |
| GR                    | WIEBE, KLAUS           | Checking the low energy level 2 filter<br>Simulation Production |  |                        |                                       | 0.20                              |                              | 0.20  |             |
| GR Total              |                        |   |  | 0.65                   | 0.20                                  |                                   | 0.50                         | 1.35  |             |
| <b>MAINZ Total</b>    |                        |   |  | <b>0.20</b>            | <b>0.65</b>                           | <b>0.35</b>                       | <b>0.50</b>                  | <b>0.50</b>   | <b>1.70</b> |
| MPI                   | KE                     | RESCONI, ELISA  | Analysis Coordinator   | 0.50                   |                                       |                                   |                              |   | 0.50        |
|                       | KE Total               |   |  | 0.50                   |                                       |                                   |                              |   | 0.50        |
|                       | PO                     | MPI PO  | Data Quality & DeepCore  |                        |                                       |                                   |                              | 0.60  | 0.60        |
|                       | PO Total               |   |  |                        |                                       |                                   |                              | 0.60  | 0.60        |
|                       | GR                     | MPI GR  | Detector Monitoring  |                        | 0.05                                  |                                   |                              |   | 0.05        |
| GR Total              |                        |   |  | 0.05                   |                                       |                                   |                              | 0.05  |             |
| <b>MPI Total</b>      |                        |   |  | <b>0.50</b>            | <b>0.05</b>                           |                                   |                              | <b>0.60</b>   | <b>1.15</b> |
| OSU                   | PO                     | OSU PO  | Monitoring shifts<br>Outreach  |                        | 0.02                                  |                                   |                              |   | 0.02        |
|                       | PO Total               |   |  |                        | 0.05                                  |                                   |                              |   | 0.05        |
|                       | PO                     | ROTT, CARSTEN   | Maintain good run list   |                        | 0.20                                  |                                   |                              |   | 0.20        |
| PO Total              |                        |   |  | 0.05                   | 0.22                                  |                                   |                              | 0.27  |             |
| <b>OSU Total</b>      |                        |   |  | <b>0.05</b>            | <b>0.22</b>                           |                                   |                              |   | <b>0.27</b> |
| PSU                   | KE                     | COWEN, DOUG   | Education & Outreach<br>ExecCom member<br>Hybrid/Tau WG Chair  | 0.05                   | 0.20                                  |                                   |                              | 0.25  | 0.05        |
|                       | KE Total               |   |  | 0.20                   |                                       |                                   |                              | 0.25  | 0.20        |
|                       | KE                     | DEYOUNG, TYCE   | Deep Core WG - Co Chair<br>Education & Outreach  | 0.05                   |                                       |                                   |                              | 0.25  | 0.05        |
|                       | KE Total               |   |  | 0.05                   |                                       |                                   |                              | 0.25  | 0.05        |
| <b>PSU Total</b>      |                        |   |  | <b>0.30</b>            |                                       |                                   | <b>0.50</b>                  |   | <b>0.80</b> |

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|-------------------|-------------------|--|---|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|----------------------|------------------------------|
|                   | PO                | CABALLERO-MORA, KAREN  | Coordination and Support for Grid and distributed computing<br>develop starting track reconstruction<br>Simulation Production |                        |                                       | 0.25                              |                              | 0.08  | 0.25<br>0.08<br>0.17 |                              |
|                   |                   | KOSKINEN, JASON  | Coordinate Deep Core reconstruction for production<br>develop and verify Deep Core filters<br>Monitoring shifts               |                        |                                       |                                   | 0.18                         | 0.12  | 0.12<br>0.18<br>0.03 |                              |
|                   | PO Total          |  |   |                        | 0.03                                  | 0.42                              | 0.18                         | 0.20  | 0.82                 |                              |
|                   | GR                | DUNKMAN, MATT  | develop and verify Deep Core filters<br>develop starting track reconstruction - hybrid reco.<br>Monitoring shifts             |                        |                                       |                                   | 0.25                         | 0.25  | 0.25<br>0.25<br>0.03 |                              |
|                   | GR Total          |  |   |                        | 0.03                                  |                                   | 0.25                         | 0.25  | 0.53                 |                              |
| <b>PSU Total</b>  |                   |  |   | <b>0.30</b>            | <b>0.06</b>                           | <b>0.42</b>                       | <b>0.93</b>                  | <b>0.45</b>   | <b>2.15</b>          |                              |
| RWTH              | KE                | WIEBUSCH, CHRISTOPHER  | Coordinate BMBF Funding   |                        | 0.10                                  |                                   |                              |   | 0.10                 |                              |
|                   | KE Total          |  |   |                        | 0.10                                  |                                   |                              |   | 0.10                 |                              |
|                   | PO                | BOERSMA, DAVID RWTH  | Gal Cen Filter & Moon Filter<br>Maintain Reconstruction Framework<br>muon channel WG Co. Chair<br>Reconstruction Coordinator  |                        |                                       |                                   | 0.10                         | 0.15  |                      | 0.15<br>0.10<br>0.25<br>0.15 |
|                   |                   | LAIHEM, KARIM  | Acoustic R&D Support<br>MonteCarlo simulations of Cherenkov light yield   |                        | 0.20                                  |                                   |                              | 0.25  | 0.15                 | 0.20<br>0.10<br>0.10         |
|                   | PO Total          |  |   | 0.20                   |                                       | 0.20                              | 0.40                         | 0.15  | 0.95                 |                              |
|                   | GR                | BISSOK, MARTIN   | Gal Cen Filter  |                        |                                       |                                   |                              | 0.10  |                      | 0.10                         |
|                   |                   | BLUMENTHAL, JAN  | Muon reconstruction   |                        |                                       |                                   |                              |   | 0.10                 | 0.10                         |
|                   |                   | EULER, SEBASTIAN.  | Finite track reconstruction   |                        |                                       |                                   |                              |   | 0.20                 | 0.20                         |
|                   |                   | PAUL, LARRISA  | RASTA & SPATS monitoring<br>Simulation Production on cluster/GRID   |                        |                                       | 0.10                              |                              |   |                      | 0.10<br>0.25                 |
|                   |                   | RWTH GR  | Development of processing scripts for L2/L1 processing<br>Development of the slow monopole trigger<br>Monitoring (3 weeks)    |                        |                                       |                                   |                              | 0.20  | 0.20                 | 0.20<br>0.20<br>0.09         |
|                   |                   | SCHUKRAFT, ANNE  | Photonics Production  |                        |                                       |                                   | 0.25                         |   |                      | 0.25                         |
|                   |                   | SCHUNCK, MATTHIAS  | Energy Reconstruction<br>Simulation Production on cluster/GRID  |                        |                                       |                                   |                              | 0.25  | 0.20                 | 0.20<br>0.25                 |
|                   |                   | WALLRAFF, MARIUS   | New Feature Extractor   |                        |                                       |                                   |                              |   | 0.30                 | 0.30                         |
|                   | GR Total          |  |   |                        |                                       | 0.19                              | 0.75                         | 0.30  | 1.00                 |                              |
|                   | <b>RWTH Total</b> |  |   |                        | <b>0.30</b>                           | <b>0.19</b>                       | <b>0.95</b>                  | <b>0.70</b>   | <b>1.15</b>          | <b>3.29</b>                  |
| SU                | KE                | FINLEY, CHAD SU  | Coordination with LIGO<br>Point Source WG Chair<br>Simulation Programs: neutrino-generator                                    | 0.10                   |                                       |                                   | 0.25                         |   | 0.10<br>0.25<br>0.20 |                              |
|                   |                   | HULTH, PER OLOF  | ExecCom member<br>ICB Member<br>Low Energy DeepCore WG Co Chair   | 0.20                   |                                       |                                   |                              | 0.20  | 0.20<br>0.05<br>0.25 |                              |
|                   |                   | HULTQVIST, KLAS  | ICB Member<br>Simulation Work, hit-maker  | 0.05                   |                                       |                                   |                              | 0.10  | 0.05<br>0.10         |                              |
|                   |                   | WALCK, CHRISTIAN   | Publications Bookkeeping  | 0.10                   |                                       |                                   |                              |   | 0.10                 |                              |
|                   | KE Total          |  |   | 0.50                   |                                       |                                   | 0.50                         | 0.30  | 1.30                 |                              |
|                   | SC                | SEO, SEON-HEE  | Develop & verify filters<br>Photonics/Simulation Work   |                        |                                       |                                   |                              | 0.05  |                      | 0.05<br>0.15                 |
|                   |                   | SU SC  | Computing Resources   |                        |                                       |                                   | 0.40                         |   |                      | 0.40                         |
|                   | SC Total          |  |   |                        |                                       | 0.40                              | 0.05                         | 0.15  | 0.60                 |                              |
|                   | GR                | DANNINGER, MATTIAS   | WIMP Trigger & Filter   |                        |                                       |                                   |                              | 0.15  |                      | 0.15                         |
|                   |                   | SU GR  | Detector Monitoring   |                        |                                       | 0.06                              |                              |   |                      | 0.06                         |
| ZOLL, MARCEL      |                   | UHE Trigger & Filter   |   |                        |                                       |                                   | 0.10                         |   | 0.10                 |                              |
| GR Total          |                   |  |   | 0.06                   |                                       |                                   | 0.25                         | 0.31  |                      |                              |
| <b>SU Total</b>   |                   |  |   | <b>0.50</b>            | <b>0.06</b>                           | <b>0.40</b>                       | <b>0.80</b>                  | <b>0.45</b>   | <b>2.21</b>          |                              |
| SUBR              | KE                | FAZELY, ALI  | GEANT Simulation<br>Reconstruction/ Analysis tools  |                        |                                       |                                   |                              | 0.15  | 0.15                 |                              |
|                   |                   | IMLAY, RICHARD   | Reconstruction/ Analysis tools<br>Simulation Programs   |                        |                                       |                                   |                              | 0.15  | 0.15                 |                              |
|                   | KE Total          |  |   |                        |                                       |                                   |                              | 0.60  | 0.60                 |                              |
|                   | SC                | TER-ANTONYAN, SAMVEL   | Detector Monitoring<br>LONI Grid computing  |                        | 0.02                                  |                                   | 0.30                         |   | 0.02<br>0.30         |                              |
| SC Total          |                   |  |   | 0.02                   |                                       | 0.30                              |                              | 0.32  |                      |                              |
| <b>SUBR Total</b> |                   |  |   |                        | <b>0.02</b>                           | <b>0.30</b>                       |                              | <b>0.60</b>   | <b>0.92</b>          |                              |
| UA                | KE                | TOALE, PATRICK   | Software Coordinator  | 0.75                   |                                       |                                   |                              |   | 0.75                 |                              |
|                   |                   | WILLIAMS, DAWN   | Data Quality Lead<br>managing flasher runs and other calibrations (stage 2 geometry)  |                        |                                       |                                   |                              | 0.15  | 0.15                 |                              |
|                   | KE Total          |  |   | 0.75                   | 0.15                                  |                                   |                              | 0.15  | 1.05                 |                              |
|                   | PO                | ZARZHITZKY, PAVEL  | Monitoring shifts<br>Simulation verification  |                        |                                       | 0.03                              |                              |   | 0.03<br>0.30         |                              |
|                   | PO Total          |  |   |                        | 0.03                                  |                                   |                              |   | 0.30                 |                              |
| GR                | XU, DONGLIAN      | DeepCore simulation verification<br>Improvements to low energy analysis framework<br>Low-energy cascade calibration with flashers<br>Monitoring shifts |   |                        | 0.10                                  |                                   |                              | 0.10<br>0.10<br>0.10<br>0.03                        |                      |                              |
| GR Total          |                   |  |   | 0.13                   |                                       |                                   | 0.20                         | 0.33  |                      |                              |
| <b>UA Total</b>   |                   |  |   | <b>0.75</b>            | <b>0.31</b>                           |                                   |                              | <b>0.65</b>   | <b>1.71</b>          |                              |
| UAA               | KE                | RAWLINS, KATHERINE   | flat-ntuple; muon-bundle-reco; Snow correction for IceTop<br>Monitoring shifts  |                        |                                       |                                   |                              | 0.30  | 0.30                 |                              |
|                   | KE Total          |  |   |                        | 0.02                                  |                                   |                              |   | 0.02                 |                              |
| <b>UAA Total</b>  |                   |  |   |                        | <b>0.02</b>                           |                                   |                              | <b>0.30</b>   | <b>0.32</b>          |                              |
| UC                | GR                | UC GR  | Detector Monitoring<br>Flasher Runs   |                        | 0.02                                  |                                   |                              |   | 0.02<br>0.10         |                              |
|                   | GR Total          |  |   |                        | 0.12                                  |                                   |                              |   | 0.12                 |                              |

**IceCube M&O Staffing Matrix sort by Institutions v10.0 2011.0422**

| Institution     | Labor Cat. | Names | Tasks | 2.1 Program Management | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total |
|-----------------|------------|-------|-------|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|-------------|
| <b>UC Total</b> |            |       |       | <b>0.12</b>            |                                       |                                   |                              | <b>0.12</b>   |             |

## IceCube M&amp;O Staffing Matrix sort by Institutions v10.0 2011.0422

| Institution                    | Labor Cat.                                 | Names  | Tasks   | 2.1 Program Management | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total |      |
|--------------------------------|--|--|---|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|-------------|------|
| UCB                            | KE   | PRICE, BUFORD  | Education & Outreach  | 0.10                   |                                       |                                   |                              |   | 0.10        |      |
|                                | KE Total                                   |  |   | 0.10                   |                                       |                                   |                              |   | 0.10        |      |
|                                | SC   | FILIMONOV, KIRILL  | Coordinate Monitoring<br>Pubcom member  | 0.10                   | 0.50                                  |                                   |                              |   | 0.50        |      |
|                                |  | UCB SC   | Monitoring shifts   |                        | 0.02                                  |                                   |                              |   | 0.02        |      |
|                                | WOSCHNAGG, KURT                            | Calibration Lead   |   |                        | 0.15                                  |                                   |                              | 0.25  | 0.15        |      |
|                                |  | Diffuse / atmosnu WG chair   |   |                        |                                       |                                   |                              |   | 0.25        |      |
|                                |  | Maintain and Verify Simulation of Photon Propagation and update Ice Properties |   |                        |                                       |                                   |                              |   | 0.50        |      |
|                                | SC Total                                   |  |   | 0.10                   | 0.67                                  |                                   | 0.25                         | 0.50  | 1.62        |      |
| GR                             | UCB GR                                     | Calibration<br>Monitoring shifts   |   | 0.10                   |                                       |                                   |                              | 0.10  |             |      |
| GR Total                       |  |  |   | 0.02                   |                                       |                                   |                              | 0.02  |             |      |
| UCB Total                      |  |  |   | 0.12                   |                                       |                                   |                              | 0.12  |             |      |
|                                |  |  |   | <b>0.30</b>            | <b>0.78</b>                           |                                   | <b>0.25</b>                  | <b>0.50</b>   | <b>1.83</b> |      |
| UCI                            | PO   | SILVERSTRI, ANDREA   | Monitoring shifts   |                        | 0.01                                  |                                   |                              |   | 0.01        |      |
|                                | PO Total                                   |  |   |                        | 0.01                                  |                                   |                              |   | 0.01        |      |
|                                | GR   | HANSON, JORDAN   | Monitoring shifts   |                        | 0.01                                  |                                   |                              |   | 0.01        |      |
|                                | GR Total                                   |  |   |                        | 0.01                                  |                                   |                              |   | 0.01        |      |
| UCI Total                      |  |  |   |                        | <b>0.02</b>                           |                                   |                              |   | <b>0.02</b> |      |
| UD                             | KE   | GAISSER, TOM   | ExecCom member  | 0.20                   |                                       |                                   |                              |   | 0.20        |      |
|                                |  | SECKEL, DAVID  | TFT Board member  |                        |                                       |                                   | 0.10                         |   | 0.10        |      |
|                                |  | UD KE  | DAQ Monitoring  |                        | 0.05                                  |                                   |                              |   | 0.05        |      |
|                                | KE Total                                   |  |   | 0.20                   | 0.05                                  |                                   | 0.10                         |   | 0.35        |      |
|                                | SC   | UD SC  | Coordinate IceTop Operations  |                        | 1.00                                  |                                   |                              |   | 1.00        |      |
|                                | SC Total                                   |  |   |                        | 1.00                                  |                                   |                              |   | 1.00        |      |
|                                | PO   | BERGHAUS, PATRICK - UD   | moun channel WG Co. Chair<br>TFT Board member                                   |                        |                                       |                                   |                              | 0.25  |             | 0.25 |
|                                |  | HUSSAIN, SHAHID  | Ice Properties Simulation   |                        |                                       |                                   |                              | 0.10  |             | 0.10 |
|                                |  | IceTop Simulation Production   |   |                        |                                       | 0.15                              |                              |   | 0.30        |      |
|                                | KUWABARA, TAKAO                            | Temp. & Pressure atmospheric monitoring  |   |                        | 0.25                                  |                                   |                              |   | 0.25        |      |
|                                | PO Total                                   |  |   |                        | 0.25                                  | 0.15                              | 0.35                         | 0.30  | 1.05        |      |
|                                | GR   | RUZYBAEV , BAKHTIYAR   | Ice Properties Simulation   |                        |                                       |                                   |                              |   | 0.30        | 0.30 |
|                                |  | XU, CHEN   | Simulation Programs: sim-services   |                        |                                       |                                   |                              |   | 0.30        | 0.30 |
| GR Total                       |  |  |   |                        |                                       |                                   | 0.60                         | 0.60  |             |      |
| UD Total                       |  |  |   | <b>0.20</b>            | <b>1.30</b>                           | <b>0.15</b>                       | <b>0.45</b>                  | <b>0.90</b>   | <b>3.00</b> |      |
| ULB                            | KE   | BERTRAND, DANIEL   | ExecCom member  | 0.20                   |                                       |                                   |                              |   | 0.20        |      |
|                                |  | HANSON, KAE ULB  | Data Acquisition  |                        | 0.20                                  |                                   |                              |   | 0.20        |      |
|                                |  |  | EMI/R&D   |                        | 0.10                                  |                                   |                              |   | 0.10        |      |
|                                | TFT Board member                           |  |   |                        |                                       | 0.10                              |                              | 0.10  |             |      |
|                                | KE Total                                   |  |   | 0.30                   | 0.20                                  |                                   | 0.10                         |   | 0.60        |      |
|                                | PO   | MAROTTA, ALBERTO   | Computer Cluster - simulation<br>Maintain and Operate Database Systems (I3Omdb) |                        |                                       | 0.30                              |                              |   | 0.30        |      |
|                                | PO Total                                   |  |   |                        |                                       | 0.20                              |                              |   | 0.20        |      |
|                                | GR   | ULB GR   | Detector Monitoring<br>Study of Tau Filters at South Pole                       |                        | 0.03                                  |                                   |                              |   | 0.03        |      |
| GR Total                       |  |  |   | 0.03                   |                                       | 0.10                              |                              | 0.10  |             |      |
| ULB Total                      |  |  |   | <b>0.30</b>            | <b>0.23</b>                           | <b>0.50</b>                       | <b>0.20</b>                  | <b>1.23</b>   |             |      |
| UMD                            | KE   | HOFFMAN, KARA  | Detector R&D  | 0.20                   |                                       |                                   |                              |   | 0.20        |      |
|                                |  | SULLIVAN, GREG   | ExecCom member  | 0.20                   |                                       |                                   |                              |   | 0.20        |      |
|                                |  | Spokesperson   |   | 0.30                   |                                       |                                   |                              |   | 0.30        |      |
|                                |  | UMD KE   | E&O   |                        | 0.10                                  |                                   |                              |   | 0.10        |      |
|                                | KE Total                                   |  |   | 0.80                   |                                       |                                   |                              |   | 0.80        |      |
|                                | SC   | BLAUFUSS, ERIK   | Core Software   |                        |                                       |                                   | 0.00                         |   |             | 0.00 |
|                                |  |  | filter requests, bandwidth, TFT Board Member                                    |                        |                                       |                                   | 0.30                         |   | 0.30        |      |
|                                |  | GRB WG Chair   |   |                        |                                       | 0.25                              |                              |   | 0.25        |      |
|                                | SCHMIDT, TORSTEN                           | Maintain PnF Software and Online Filters                                       |   | 0.20                   |                                       |                                   |                              | 0.20  |             |      |
|                                | Maintain Core Analysis Framework (IceTray) |  |   | 0.25                   | 0.50                                  |                                   |                              | 0.50  |             |      |
|                                | Maintain PnF Software and Online Filters   |  |   |                        |                                       |                                   |                              | 0.25  |             |      |
|                                | SC Total                                   |  |   |                        | 0.45                                  | 0.50                              | 0.55                         |   | 1.50        |      |
|                                | PO   | OLIVAS, ALEX   | Exotics- WG chair   |                        |                                       |                                   |                              | 0.25  |             | 0.25 |
|                                |  |  | Pubcom member   |                        | 0.10                                  |                                   |                              |   | 0.10        |      |
|                                |  | Simulation Software Programs coordinator                                       |   |                        |                                       |                                   |                              | 0.40  | 0.40        |      |
|                                | UMD PO                                     | Monitoring shifts  |   |                        | 0.03                                  |                                   |                              |   | 0.03        |      |
|                                | WISSING, HENRIKE                           | develop & test reconstruction  |   |                        |                                       |                                   |                              |   | 0.13        | 0.13 |
|                                |  | EHE and Brights WG co-chair  |   |                        |                                       |                                   | 0.25                         |   | 0.25        |      |
|                                | Maintain Detector Simulation (IceSim)      |  |   |                        |                                       |                                   |                              | 0.13  |             |      |
|                                | Pubcom member                              |  |   | 0.10                   |                                       |                                   |                              |   | 0.10        |      |
| PO Total                       |  |  | 0.20  | 0.03                   |                                       | 0.50                              | 0.65                         | 1.38  |             |      |
| GR                             | CHRISTY, BRIAN                             | Simulation Production coordination   |   |                        |                                       | 0.25                              |                              |   | 0.25        |      |
|                                | HELLAUER, ROBERT                           | Prepare datasets for filter testing and common MC datasets for testing         |   |                        |                                       |                                   | 0.20                         |   | 0.20        |      |
|                                | MEAGHER, KEVIN                             | Core Software  |   |                        |                                       | 0.50                              |                              | 0.50  |             |      |
|                                | REDL, PETER                                | Maintain Detector Simulation (IceSim)  |   |                        |                                       |                                   | 0.25                         | 0.25  |             |      |
|                                | Online Filter Testing                      |  |   | 0.25                   |                                       |                                   |                              | 0.25  |             |      |
| Reconstruction/ Analysis tools |  |  |   |                        |                                       | 0.25                              | 0.25                         |   |             |      |
| UMD GR                         | Core Software                              |  |   |                        | 0.25                                  |                                   | 0.25                         |   |             |      |
| Monitoring shifts              |  |  | 0.06  |                        |                                       |                                   | 0.06                         |   |             |      |
| GR Total                       |  |  |   | 0.31                   | 1.00                                  | 0.20                              | 0.50                         | 2.01  |             |      |
| CS                             | UMD CS                                     | Maintain Core Software Repository  |   |                        |                                       | 0.25                              |                              | 0.25  |             |      |
| CS Total                       |  |  |   |                        |                                       | 0.25                              |                              | 0.25  |             |      |
| TE                             | STRASZHEIM, TROY                           | Maintain Core Analysis Framework (IceTray)                                     |   |                        |                                       | 0.88                              |                              | 0.88  |             |      |
|                                | UMD TE                                     | Coordination and Support for Grid and distributed computing                    |   |                        |                                       |                                   | 0.25                         | 0.25  |             |      |
| TE Total                       |  |  |   |                        |                                       | 1.13                              |                              | 1.13  |             |      |
| UMD Total                      |  |  |   | <b>1.00</b>            | <b>0.79</b>                           | <b>2.88</b>                       | <b>1.25</b>                  | <b>1.15</b>   | <b>7.07</b> |      |
| UMH                            | GR   | KOHNEN, GEORGE   | Detector Monitoring   |                        | 0.03                                  |                                   |                              |   | 0.03        |      |

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| Institution      | Labor Cat. | Names                        | Tasks  | 2.1 Program Management | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total |
|------------------|------------|------------------------------|--|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|-------------|
|                  |            |                              | IC database management   |                        |                                       | 0.30                              |                              |   | 0.30        |
|                  | GR Total   |                              |  |                        | 0.03                                  | 0.30                              |                              |   | 0.33        |
| <b>UMH Total</b> |            |                              |  |                        | <b>0.03</b>                           | <b>0.30</b>                       |                              |   | <b>0.33</b> |
| UOX              | KE         | SARKAR, SUBIR                | Detector Monitoring  |                        | 0.02                                  |                                   |                              |   | 0.02        |
|                  |            |                              | Yellow Book-maintenance  |                        |                                       |                                   |                              | 0.10  | 0.10        |
|                  | KE Total   |                              |  |                        | 0.02                                  |                                   |                              | 0.10  | 0.12        |
| <b>UOX Total</b> |            |                              |  |                        | <b>0.02</b>                           |                                   |                              | <b>0.10</b>   | <b>0.12</b> |
| UU               | KE         | BOTNER, OLGA                 | Outreach   | 0.05                   |                                       |                                   |                              |   | 0.05        |
|                  |            |                              | Pubcom Chair   | 0.40                   |                                       |                                   |                              |   | 0.40        |
|                  |            | DE LOS HEROS, CARLOS         | TFT Board member   |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  |            |                              | WIMP WG Chair  |                        |                                       |                                   | 0.25                         |   | 0.25        |
|                  |            | HALLGREN, ALLAN              | Acoustic R&D Support   | 0.10                   |                                       |                                   |                              |   | 0.10        |
|                  |            |                              | online filter development  |                        |                                       |                                   | 0.05                         |   | 0.05        |
|                  |            |                              | Outreach   | 0.05                   |                                       |                                   |                              |   | 0.05        |
|                  |            |                              | Speakers Comm member   | 0.10                   |                                       |                                   |                              |   | 0.10        |
|                  | KE Total   |                              |  | 0.70                   |                                       |                                   | 0.40                         |   | 1.10        |
|                  | PO         | MILLER, JONATHAN             | Flasher Calibration  |                        | 0.20                                  |                                   |                              |   | 0.20        |
|                  |            |                              | Simulation Programs: photonics   |                        |                                       |                                   |                              | 0.05  | 0.05        |
|                  | PO Total   |                              |  |                        | 0.20                                  |                                   |                              | 0.05  | 0.25        |
|                  | GR         | HENRIC, TAAVOLA              | Online filter development & testing  |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  |            | STROM, RICKARD               | Online filter development & testing  |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  |            | UU GR                        | Detector Monitoring  |                        |                                       | 0.03                              |                              |   | 0.03        |
|                  | GR Total   |                              |  |                        |                                       | 0.03                              | 0.20                         |   | 0.23        |
| <b>UU Total</b>  |            |                              |  | <b>0.70</b>            | <b>0.23</b>                           |                                   | <b>0.60</b>                  | <b>0.05</b>   | <b>1.58</b> |
| UW               | KE         | HALZEN, FRANCIS              | Principle Investigator   | 0.42                   |                                       |                                   |                              |   | 0.42        |
|                  |            | KARLE, ALBRECHT              | Associate Director for Science and Instrumentation   | 0.42                   |                                       |                                   |                              |   | 0.42        |
|                  |            | MARUYAMA, REINA              | Supernova WG Chair   |                        |                                       |                                   | 0.25                         |   | 0.25        |
|                  |            | MONTARULI, TERESA            | TFT Board member   |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  |            | WESTERHOFF, STEFAN           | CR-WG Co Chair   |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  |            |                              | Pubcom member  | 0.10                   |                                       |                                   |                              |   | 0.10        |
|                  |            | YECK, JAMES                  | Director of Operations   | 0.75                   |                                       |                                   |                              |   | 0.75        |
|                  | KE Total   |                              |  | 1.68                   |                                       |                                   | 0.45                         |   | 2.13        |
|                  | SC         | CHIRKIN, DMITRY              | Direct photon tracking / iceproperties calibration 0.3 ;<br>FE/pulse extractor 0.1 ; reco software 0.1               |                        |                                       |                                   |                              | 0.40  | 0.40        |
|                  |            |                              | Simulation Programs: mmc/mmc-icetray and ucr-icetray   |                        |                                       |                                   |                              | 0.20  | 0.20        |
|                  |            | DESIATI, PAOLO               | Coordination of Simulation Production  |                        |                                       | 0.70                              |                              |   | 0.70        |
|                  |            |                              | TFT Board member   |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  |            | HILL, GARY                   | Maintain and Verify Simulation of Photon Propagation<br>and update Ice Properties                                    |                        |                                       |                                   |                              | 0.30  | 0.30        |
|                  |            |                              | Offline processing   |                        |                                       |                                   |                              | 0.20  | 0.20        |
|                  |            |                              | Weekly call, ICC support   | 0.20                   |                                       |                                   |                              |   | 0.20        |
|                  |            | KRASBERG, MARK               | DOM Cal Maintenance, DOM Monitoring and<br>Troubleshooting   |                        | 0.35                                  |                                   |                              |   | 0.35        |
|                  |            |                              | Provide Real-time System Monitoring and Paging   |                        | 0.20                                  |                                   |                              |   | 0.20        |
|                  |            |                              | Winterovers coordinator  |                        | 0.25                                  |                                   |                              |   | 0.25        |
|                  |            | LANDSMAN, YAEL HAGAR         | Science Support  | 0.25                   |                                       |                                   |                              |   | 0.25        |
|                  |            | WENDT, CHRISTOPHER           | DOM CAL Maintenance  |                        | 0.25                                  |                                   |                              |   | 0.25        |
|                  |            |                              | Prepare and Evaluate Flasher Calibrations. Evaluate<br>(DomCal) Calibration Runs and update Calibration<br>constants |                        | 0.28                                  |                                   |                              |   | 0.28        |
|                  | SC Total   |                              |  | 0.45                   | 1.33                                  | 0.70                              | 0.10                         | 1.10  | 3.68        |
|                  | PO         | ABBASI, RASHA                | DST data checking  |                        |                                       |                                   |                              | 0.10  | 0.10        |
|                  |            | AGUILAR SANCHEZ JUAN ANTONIO | GRB  |                        |                                       |                                   |                              | 0.15  | 0.15        |
|                  |            |                              | low level moun data verification (data/mc)   |                        |                                       |                                   |                              | 0.10  | 0.10        |
|                  |            | AUFFENBERG, JAN              | Energy Reconstruction  |                        |                                       |                                   |                              | 0.15  | 0.15        |
|                  |            |                              | Offline Data Processing - EHE  |                        |                                       |                                   |                              | 0.15  | 0.15        |
|                  |            |                              | Online filters (EHE)   |                        |                                       |                                   | 0.15                         |   | 0.15        |
|                  |            | HOSHINA, KOTOYO              | nugen maintenance  |                        |                                       |                                   |                              | 0.20  | 0.20        |
|                  |            | KURAHASHI, NAOKO             | IceTray Support (Q frame)  |                        |                                       | 0.15                              |                              |   | 0.15        |
|                  |            |                              | Offline Level 2 Processing   |                        |                                       |                                   |                              | 0.20  | 0.20        |
|                  |            |                              | Online processing-muon channel   |                        |                                       | 0.20                              |                              |   | 0.20        |
|                  |            | TOSCANO, SIMONA              | Cascade data processing  |                        |                                       | 0.30                              |                              |   | 0.30        |
|                  |            |                              | Cascade Online filter  |                        |                                       |                                   | 0.10                         |   | 0.10        |
|                  | PO Total   |                              |  |                        | 0.12                                  | 0.65                              | 0.25                         | 1.05  | 2.07        |
|                  | GR         | BAKER, MICHAEL               | Stability (L2 Processing)  |                        | 0.10                                  |                                   |                              |   | 0.10        |
|                  |            | EISCH, JONATHAN              | IceTop Simulation Production   |                        |                                       | 0.30                              |                              |   | 0.30        |
|                  |            | FEINTZIG, JACOB              | Ice Properties   |                        | 0.15                                  |                                   |                              |   | 0.15        |
|                  |            | GLADSTONE, LAURA             | Moon Shadow  |                        | 0.10                                  |                                   |                              |   | 0.10        |
|                  |            |                              | Reconstruction tools-Deep Core   |                        |                                       |                                   |                              | 0.15  | 0.15        |
|                  |            | RODRIGUES, JOAO-PAULO        | Supernova simulation / moun energy reconstruction  |                        |                                       |                                   |                              | 0.20  | 0.20        |
|                  |            | SANTANDER, MARCOS            | Moon Shadow  |                        | 0.15                                  |                                   |                              |   | 0.15        |
|                  |            | UW GR                        | Monitoring shifts  |                        | 0.12                                  |                                   |                              |   | 0.12        |
|                  |            | VAN SANTEN, JACOB            | Calibration of DOM waveforms   |                        | 0.15                                  |                                   |                              |   | 0.15        |
|                  |            |                              | IceTray Support (IZMA)   |                        |                                       | 0.15                              |                              |   | 0.15        |
|                  |            |                              | Online filters / SuperDST  |                        |                                       |                                   | 0.15                         |   | 0.15        |
|                  |            | WEAVER, CHRISTOPHER          | DOM CAL Maintenance  |                        | 0.15                                  |                                   |                              |   | 0.15        |
|                  |            | WHITEHORN, NATHAN            | Energy Reconstruction  |                        |                                       |                                   |                              | 0.15  | 0.15        |
|                  |            |                              | Photonics tables   |                        |                                       |                                   |                              | 0.20  | 0.20        |
|                  | GR Total   |                              |  |                        | 0.92                                  | 0.45                              | 0.15                         | 0.70  | 2.22        |
|                  | MA         | DUVERNOIS, MICHAEL           | EMI, Instrumentation, I/F  | 0.25                   |                                       |                                   |                              |   | 0.25        |
|                  |            | HAUGEN, JAMES                | USAP Support   | 0.25                   |                                       |                                   |                              |   | 0.25        |
|                  |            | LAITSCH, DENISE              | Detector Operations Manager  |                        | 1.00                                  |                                   |                              |   | 1.00        |
|                  |            | MERCK, MARTIN                | Computing Infrastructure Management  | 1.00                   |                                       |                                   |                              |   | 1.00        |
|                  |            | PELES, ADI                   | Resource Coordinator   | 0.50                   |                                       |                                   |                              |   | 0.50        |
|                  | MA Total   |                              |  | 2.00                   | 1.00                                  |                                   |                              |   | 3.00        |

## IceCube M&amp;O Staffing Matrix sort by Institutions v10.0 2011.0422

| Institution  | Labor Cat.  | Names  | Tasks  | 2.1 Program Management                        | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total  |      |
|--|---|--|--|---|---------------------------------------|-----------------------------------|------------------------------|---|--------------|------|
| AD   | MALKUS, EVELYN  | Education & Outreach Coordination  |  | 0.75  |                                       |                                   |                              |   | 0.75         |      |
|  |   | RICHARDS, JOHN   | Maintain and Operate Data Storage Infrastructure   |   |                                       |                                   | 1.00                         |   | 1.00         |      |
|  | UW AD   | Administrative Support   |  | 0.50  |                                       |                                   |                              |   | 0.50         |      |
|  |   | Host Spring collaboration meeting  |  | 0.50  |                                       |                                   |                              |   | 0.50         |      |
|  | AD Total  |  |  | 1.75  |                                       | 1.00                              |                              |   | 2.75         |      |
|  | SE  | GLOWACKI, DAVID  | Maintain DAQ Software Systems (incl. triggers, DOM SW, etc. up to Event Builder)   |   |                                       | 1.00                              |                              |   |              | 1.00 |
|  |   |  | LAUNDRIE, ANDREW   | EMI, Instrumentation, I/F Engineering Support |                                       | 0.25                              |                              |   |              | 0.25 |
|  |   | SANDSTROM, PERRY   | Maintain South Pole Test System Hardware and Operating Systems   |   | 0.45                                  |                                   |                              | 0.10  |              | 0.10 |
|  |   |  | EMI, Instrumentation, I/F Engineering Support  |   | 0.15                                  |                                   |                              |   |              | 0.15 |
|  |   |  | Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...) Maintain South Pole Computing Hardware Infrastructure and operating systems |   | 0.15                                  |                                   |                              | 0.25  |              | 0.25 |
| SE Total   |   |  | 1.00   | 1.60  |                                       |                                   |                              | 2.60  |              |      |
| CS   | JACOBSEN, JOHN (NPX)  | IceCube Live Maintenance and Upgrades  |  |   | 0.85                                  |                                   |                              |   | 0.85         |      |
|  |   | Maintain DAQ Hardware (Hubs, DOR, Clocks, GPS,...)   |  |   | 0.15                                  |                                   |                              |   | 0.15         |      |
|  | SOUNDARAPANDIAN, KARTHIK  | Maintain South Pole Computing Hardware Infrastructure and operating systems  |  |   | 0.75                                  |                                   |                              |   | 0.75         |      |
|  |   | Maintain South Pole Test System Hardware and Operating Systems   |  |   | 0.25                                  |                                   |                              |   | 0.25         |      |
| CS Total   |   |  |  | 2.00  |                                       |                                   |                              | 2.00  |              |      |
| TE   | BELLINGER, JIM  | Maintain DAQ Software Systems  |  |   | 0.25                                  |                                   |                              |   | 0.25         |      |
|  |   | Organize and monitor the production of filtered science data. Organize the usage of data analysis computing storage. Migrate data to second tier storage                 |  |   |                                       | 0.50                              |                              |   | 0.50         |      |
|  |   | Support the development of data warehouse software   |  |   |                                       | 0.25                              |                              |   | 0.25         |      |
|  | DIAZ-VELEZ, JUAN CARLOS   | Maintain Simulation Production Software  |  |   |                                       |                                   |                              | 0.20  | 0.20         |      |
|  |   | Simulation Programs: diploia   |  |   |                                       | 0.80                              |                              |   | 0.80         |      |
|  | FADIRAN, OLADIPO  | Maintain Data Processing Software  |  |   |                                       | 0.20                              |                              |   | 0.20         |      |
|  |   | Simulation Production Coordination; production configurations, test production and web portal. Transformation of Data for Long-Term Persistence and Archival, e.g., HDF5 |  |   |                                       | 0.60                              |                              |   | 0.60         |      |
|  | MEADE, PATRICK  | Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface   |  |   |                                       | 0.20                              |                              |   | 0.20         |      |
|  |   | Transfer Data from S. Pole to UW Data Warehouse and Archive at S. Pole   |  |   |                                       |                                   | 0.50                         |   | 0.50         |      |
|  | SCHULTZ, DAVID  | Maintain Data Transfer SW (SPADE)  |  |   |                                       |                                   |                              | 0.50  | 0.50         |      |
| Maintain Data Warehouse Standards, Software (Ingest), Data Access (FTP), and Web Interface |   |  |  | 0.50  |                                       |                                   | 0.50                         |   |              |      |
| UW TE  | Unpacking, Decoding & Calibration of Raw Data (Level1); Run Common Reconstructions on UW IceCube Compute Cluster (Level2) |  |  |   | 1.00                                  |                                   |                              | 1.00  |              |      |
|  | Maintain Core High Performance Computing Systems  |  |  |   |                                       | 0.44                              |                              | 0.44  |              |      |
| TE Total   |   |  |  | 0.25  | 5.49                                  | 0.20                              |                              | 5.94  |              |      |
| WO   | UW WO   | Operate Detector (Winter-Overs)  |  |   | 3.00                                  |                                   |                              |   | 3.00         |      |
| WO Total   |   |  |  | 3.00  |                                       |                                   |                              | 3.00  |              |      |
| EN   | SKARLUPKA, HEATH  | Maintain Core High Performance Computing Systems   |  |   |                                       | 1.00                              |                              |   | 1.00         |      |
|  |   | Coordination and Support for Grid and distributed computing  |  |   |                                       |                                   |                              |   |              |      |
|  | UW EN   | Engineering Support  |  | 0.10  |                                       |                                   |                              |   | 0.10         |      |
|  | UW TE   | Maintain Data Center Infrastructure  |  |   |                                       | 1.00                              |                              |   | 1.00         |      |
|  | WISNIEWSKI, PAUL  | Maintain Data Center Networking and Security   |  |   |                                       | 0.75                              |                              |   | 0.75         |      |
| EN Total   |   |  | 0.10   | 0.25  | 2.75                                  |                                   |                              | 3.10  |              |      |
| <b>UW Total</b>  |   |  |  | <b>6.98</b>                                   | <b>10.47</b>                          | <b>11.04</b>                      | <b>0.95</b>                  | <b>3.05</b>   | <b>32.49</b> |      |
| UWRF   | KE  | MADSEN, JIM  | Cosmic ray shower simulations and reconstruction   |   |                                       |                                   |                              | 0.10  | 0.10         |      |
|  |   |  | Teachers' program and UWRF Upward Bound  |   | 0.10                                  |                                   |                              |   | 0.10         |      |
|  | SPICZAK, GLENN  | IceTop tank Monitoring   |  |   | 0.03                                  |                                   |                              |   | 0.03         |      |
|  |   |  |  |   |                                       |                                   |                              |   |              |      |
|  | KE Total  |  |  | 0.10  | 0.03                                  |                                   |                              | 0.10  | 0.23         |      |
| TE   | UWRF TE   | Teachers Program   |  | 0.10  |                                       |                                   |                              |   | 0.10         |      |
| TE Total   |   |  | 0.10   |   |                                       |                                   |                              | 0.10  |              |      |
| <b>UWRF Total</b>  |   |  |  | <b>0.20</b>                                   | <b>0.03</b>                           |                                   |                              | <b>0.10</b>   | <b>0.33</b>  |      |
| VUB  | KE  | VUB KE   | data quality verification  |   |                                       |                                   |                              | 0.25  | 0.25         |      |
|  |   |  | development of reconstruction tools (IcePack framework)  |   |                                       |                                   |                              | 0.25  | 0.25         |      |
|  | KE Total  |  |  |   |                                       |                                   |                              | 0.50  | 0.50         |      |
|  | PO  | BOSE, DEBANJAN   | muon track reconstruction in IceCube and DeepCore, waveform feature extractor  |   |                                       |                                   |                              |   | 0.25         | 0.25 |
|  |   |  | verification Deep Core data quality  |   |                                       |                                   |                              | 0.25  | 0.25         |      |
| BUITIN,STIJN   | Filter for Southern sky muons   |  |  |   |                                       | 0.25                              |                              | 0.25  |              |      |
|  | muon track reconstruction in IceCube and DeepCore, waveform feature extractor   |  |  |   |                                       |                                   | 0.13                         | 0.13  |              |      |
| LABARE, MATHIEU  | verification Deep Core data quality   |  |  |   |                                       |                                   | 0.13                         | 0.13  |              |      |
|  | Filter for Southern sky muons   |  |  |   |                                       | 0.25                              |                              | 0.25  |              |      |

**IceCube M&O Staffing Matrix sort by Institutions v10.0 2011.0422**

| Institution      | Labor Cat. | Names          | Tasks  | 2.1 Program Management | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total |
|------------------|------------|----------------|--|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|-------------|
|                  |            |                | muon track reconstruction in IceCube and DeepCore verification Deep Core data quality  |                        |                                       |                                   |                              | 0.13  | 0.13        |
|                  |            | STRAHLER, ERIK | simulation of ice properties and DOM sensitivities verification Deep Core data quality |                        |                                       | 0.25                              |                              |   | 0.25        |
|                  |            | VUB PO         | Monitoring shifts  |                        | 0.06                                  |                                   |                              |   | 0.06        |
|                  | PO Total   |                |  |                        | 0.06                                  | 0.25                              | 0.50                         | 1.25  | 2.06        |
| <b>VUB Total</b> |            |                |  |                        | <b>0.06</b>                           | <b>0.25</b>                       | <b>0.50</b>                  | <b>1.75</b>   | <b>2.56</b> |



**IceCube M&O Staffing Matrix sort by Institutions v10.0 2011.0422**

| Institution            | Labor Cat. | Names          | Tasks   | 2.1 Program Management | 2.2 Detector Operations & Maintenance | 2.3 Computing And Data Management | 2.4 Triggering And Filtering | 2.5 Data Quality, Reconstruction & Simulation Tools | Grand Total  |      |
|------------------------|------------|----------------|---|------------------------|---------------------------------------|-----------------------------------|------------------------------|---|--------------|------|
| WUPPERTAL              | KE         | HELBING, KLAUS | R&D Lead  | 0.10                   |                                       |                                   |                              |   | 0.10         |      |
|                        |            |                | Speakers Comm member  | 0.10                   |                                       |                                   |                              |   | 0.10         |      |
|                        |            | WUPPERTAL KE   | RFI   | 0.10                   |                                       |                                   |                              |   | 0.10         |      |
|                        | KE Total   |                |   |                        | 0.30                                  |                                   |                              |   | 0.30         |      |
|                        | PO         | KARG, TIMO     | Acoustic Lead   | 0.10                   |                                       |                                   |                              |   | 0.10         |      |
|                        |            |                | Simulation Production   |                        |                                       | 0.20                              |                              |   | 0.20         |      |
|                        | PO Total   |                |   |                        | 0.10                                  | 0.20                              |                              |   | 0.30         |      |
|                        | GR         | WUPPERTAL GR   | AURA, SPATS, surface antenna operations (RICE)<br>New SUSY Filter<br>New SUSY Reconstruction, Simulation, Propagation,<br>Monopole, Photonics<br>Simulation Production<br>South Pole EMI Monitoring |                        | 0.45                                  |                                   |                              |   |              | 0.45 |
|                        |            |                |   |                        |                                       |                                   | 0.20                         |   |              | 0.20 |
|                        |            |                |   |                        |                                       | 0.20                              |                              |   |              | 0.50 |
|                        |            |                |   |                        | 0.15                                  |                                   |                              |   |              | 0.15 |
| GR Total               |            |                |   | 0.60                   | 0.20                                  | 0.20                              | 0.50                         | 1.50  |              |      |
| <b>WUPPERTAL Total</b> |            |                |   | <b>0.40</b>            | <b>0.60</b>                           | <b>0.40</b>                       | <b>0.20</b>                  | <b>0.50</b>   | <b>2.10</b>  |      |
| <b>Grand Total</b>     |            |                |   | <b>13.78</b>           | <b>18.69</b>                          | <b>22.03</b>                      | <b>9.33</b>                  | <b>16.40</b>  | <b>80.22</b> |      |