**IceCube Institutional Memorandum Of Understanding (M&O)**

**Scope of Work**

**Stockholm University**

**Klas Hultqvist**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **4** (3 1 2)

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Labor Cat.** | **Names** | **WBS L3** | **Tasks** | **WBS 2.1** | **WBS 2.2** | **WBS 2.3** | **WBS 2.4** | **WBS 2.5** | **WBS 2.6** | **Grand Total** |
|  |  |  |  | Program Coordination | Detector Maintenance & Operations | Computing & Data Management  | Data Processing & Simulation  | Software | Calibration |  |
|  KE | HULTQVIST, KLAS | Administration | ICB Member | 0.05 |  |  |  |  |  | 0.05 |
|  |  | Education & Outreach | Masterclasses, model, etc. | 0.05 |  |  |  |  |  | 0.05 |
|   | **HULTQVIST, KLAS Total** |  | **0.10** |  |  |  |  |  | **0.10** |
|   | WALCK, CHRISTIAN | Administration | Publications bookkeeping  | 0.05 |   |   |   |   |  | 0.05 |
|   | **WALCK, CHRISTIAN Total** |  | **0.05** |  |  |  |  |  | **0.05** |
|   | FINLEY, CHAD | Administration | ICB Member | 0.05 |   |   |   |   |  | 0.05 |
|  |  | Administration | Coordination with LIGO and ANTARES | 0.05 |  |  |  |  |  | 0.05 |
|  |  | Administration | Pubcomm member | 0.10 |  |  |  |  |  | 0.10 |
|  |  | Real-Time Alerts | Realtime Oversight Committee |  | 0.05 |  |  |  |  | 0.05 |
|  |  | Education & Outreach | Masterclasses, model, etc. | 0.05 |  |  |  |  |  | 0.05 |
|  | **FINLEY, CHAD Total** |  | **0.25** | **0.05** |  |  |  |  | **0.30** |
| PO | O’SULLIVAN, ERIN | Reconstruction | Online event reco & ang. unc. estimation |   |   0.20 |  |  |   |  | 0.20 |
|  | **O’SULLIVAN, ERIN Total** |  |  | **0.20** |  |  |  |  | **0.20** |
| GR | DEOSKAR, KUNAL | Reconstruction | Event reconstruction, angular resolution |  |  |  |  | 0.20 |  | 0.20 |
|  |  | Detector Monitoring | Detector monitoring |  | 0.06 |  |  |  |  | 0.06 |
|   | JANSSON, MATTI | Simulation | Strike team |   |  |   |  0.25 |  |  | 0.25 |
|  | **SU GR Total** |  |  | **0.06** |  | **0.25** | **0.20** |  | **0.51** |
| **SU Total** |  |  | **0.40** | **0.31** |  | 0.25 | **0.20** |  | **1.16** |

**Faculty:**

Klas Hultqvist – (0.60 FTE for IceCube) - ICB member (0.05), Outreach (0.05)

Christian Walck - (0.10 FTE for IceCube) – Publications Bookkeeping (0.05)

Chad Finley – (0.50 FTE for IceCube) – ICB Member (0.05), Pubcomm member (0.10) coordination with LIGO and ANTARES (0.05), ROC (0.05), Outreach (0.05)

**Postdocs:**

Erin O’Sullivan - (0.50 FTE for IceCube) – Online event reconstruction and angular uncertainty estimation (0.20)

**Ph.D. Students:**

Kunal Deoskar – Thesis/Analysis topics: Point sources

 Matti Jansson – Thesis/Analysis topic TBD

**Diploma/Master Students:**

 Patrik Tengner – Direction reco. systematics

 Jens Ulrich – Energy reco. systematics

 Karl Lundqvist – High E neutrinos from SNe

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