**IceCube Institutional Memorandum Of Understanding (MOU)**

**Scope of Work**

**DESY-Zeuthen**

**Christian Spiering**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **8** (3 5 9)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Labor Cat.** | **Names** | **WBS L3** | **Tasks** | **WBS 2.1** | **WBS 2.2** | **WBS 2.3** | **WBS 2.4** | **WBS 2.5** | **Grand Total** |
| Program Management | Detector Maintenance & Operations | Computing & Data Management | Triggering & Filtering | Data Quality, Reconstruction & Simulation Tools |
| KE | SPIERING, CHRISTIAN | Administration | ExecCom member | 0.20 |  |  |  |  | 0.20 |
|   | **SPIERING, CHRISTIAN Total** |  | **0.20** |  |  |  |  | **0.20** |
|  | NAHNHAUER, ROLF | Engineering and R&D Support | Acoustic R&D Support | 0.10 |  |  |  |  | 0.10 |
|   | **NAHNHAUER, ROLF Total** |  | **0.10** |  |  |  |  | **0.10** |
| SC | ACKERMANN, MARKUS | Administration | Analysis Coordinator | 0.35 |  |  |  |  | 0.35 |
|  | **ACKERMANN, MARKUS Total** |  | **0.35** |  |  |  |  | **0.35** |
|  | GORA, DARIUSZ  | Simulation production | Simulation Production Cluster |  |  | 0.20 |  |  | 0.20 |
|  |  | Physics Filters | Online Filter Alerts / NToO program |  |  |  | 0.15 |  | 0.15 |
|   | **GORA, DARIUSZ** **Total** |  |  |  | **0.20** | **0.15** |  | **0.35** |
|   | DESY SC | Detector Monitoring | Detector Monitoring |  | 0.05 |  |  |  | 0.05 |
|   | **DESY SC** **Total** |  |  | **0.05** |  |  |  | **0.05** |
| PO  | KARG, TIMO | Engineering and R&D Support | Acoustic  | 0.10 |   |   |   |   | 0.10 |
|  |  | TFT Coordination | TFT Board Member |  |   |   |  0.10 |   | 0.10 |
|  |  | Simulation Production | Simulation Production |   |   | 0.20 |   |   | 0.20 |
|   | **KARG, TIMO** **Total** |  | **0.10** |  | **0.20** | **0.10** |  | **0.40** |
|  | BERGHAUS, PATRICK  | Simulation Programs | muon channel WG Co. Chair |  |   |   | 0.25 |  | 0.25 |
|  |  | TFT Coordination | TFT Board member |  |   |   | 0.10 |  | 0.10 |
|   | **BERGHAUS, PATRICK** **Total** |  |  |  |  | **0.35** |  | **0.35** |
| GR | SCHöNWALD, ARNE | Data Storage & Transfer | Data transfer UW-DESY |  |  | 0.10 |  |  | 0.10 |
|   |  | Reconstruction/ Analysis tools | Cascade reco. |  |  |  |  | 0.10 | 0.10 |
|   | JACOBI, EMANUEL | Computing Resources | Reconstruction Release Manager, Maintain Reconstruction Framework |  |  | 0.20 |  |  | 0.20 |
|   | STOESSL, ACHIM | Detector Calibration | Flasher Analysis |  | 0.20 |  |  |  | 0.20 |
|   | DESY GR | Detector Monitoring | Detector Monitoring |  | 0.12 |  |  |  | 0.12 |
|   |  | Simulation Production | Simulation Production Cluster |  |  | 0.15 |  |  | 0.15 |
|   | **DESY GR Total** |  |  | **0.32** | **0.45** |  | **0.10** | **0.87** |
| TE | DESY TE | Computing Resources | European Data Center -Distributed Computing and Labor |  |  | 2.00 |  |  | 2.00 |
|   | **DESY TE Total** |  |  |  | **2.00** |  |  | **2.00** |
| **DESY Total** |  |  | **0.75** | **0.37** | **2.85** | **0.60** | **0.10** | **4.67** |

**Faculty:**

Christian Spiering (L,+) – Past spokesperson, ExecCom

Elisa Bernardini – point sources, ToO

Rolf Nahnhauer – DeepCore, IceTop

**Scientists and Post Docs:**

Markus Ackermann – analysis coordinator, cascades

Dariusz Gora – simulation production, point sources, NToO

Timo Karg – IceTop/RASTA, TFT Board member

Patrick Berghaus – co-convener muon working group, TFT board member

Revaz Shanidze – to be added to the authors list, replacing Jürgen Brunner

**Students:**

PhD students:

Emanuel Jacobi – Reconstruction coordination, monopoles

Angel Humberto Cruz Silva – point sources

Juan Pablo Yanez – Deep Core

Arne Schoenwald – data transfer, cascade filter IC79

Achim Stoessl – cascades, flasher analysis

Torsten Gluesenkamp – point sources, Zeuthen group administration

Lars Mohrmann – cascades

Meike de With – Dark Matter with DeepCore

Hans-Peter Breetz – DeepCore/PINGU, will possibly move to charm production when PINGU proposal is ready

Master students:

Basho Kaminski – Monopoles: just submitted his master thesis. Possibly PhD student at Humboldt working on monopoles/nuclearites

Andrii Terliyuk – PINGU