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

**Scope of Work**

**Universität Wuppertal**

**Klaus Helbing**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads) : **2** (1 1 7)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | HELBING, KLAUS | Administration | Speakers Comm member | 0.10 |  |  |  |  | 0.10 |
|  | Physics Filters | Exotics WG chair |  |  |  | 0.25 |  | 0.25 |
|  | **HELBING, KLAUS Total** | |  | **0.10** |  |  | **0.25** |  | **0.35** |
| GR | WUPPERTAL GR | Detector Monitoring | SPATS  South Pole EMI Monitoring |  | 0.10  0.15 |  |  |  | 0.10  0.15 |
|  |
|  | Physics Filters | New SUSY Filter |  |  |  | 0.20 |  | 0.20 |
|  | Reconstruction/ Analysis tools | New SUSY Reconstruction, Simulation, Propagation, Monopole, Photonics, muon detection with IceTop |  |  |  |  | 0.60 | 0.60 |
|  | Simulation Production | Simulation Production |  |  | 0.20 |  |  | 0.20 |
|  | **WUPPERTAL GR Total** | |  |  | **0.25** | **0.20** | **0.20** | **0.60** | **1.25** |
| **WUPPERTAL Total** | |  |  | **0.10** | **0.25** | **0.20** | **0.45** | **0.60** | **1.60** |

**Faculty:**

K. Helbing (L) – Exotics WG chair, Speakers Comm member, Outreach.

**Scientists and Post Docs:**

Andreas Tepe – Analysis topics: SUSY and IceTop muons

**Ph.D. Students:**

Sandro Kopper – Exotics, SUSY simulation, reconstruction.

Thesis/Analysis topics:

Jonas Posselt – Exotics, monopole simulation, analysis.

Thesis/Analysis topics:

Daniel Bindig – IceTop and CR composition

Thesis/Analysis topics:

Dennis Soldin – exotics; SUSY in CRs

Thesis/Analysis topics:

Anna Obertacke – sub-Cherenkov monopoles

Thesis/Analysis topics:

Ruth Hoffmann – Acoustic R&D

Thesis/Analysis topics:

Ahmad Omairat – muon identification and composition with IceTop

Thesis/Analysis topics:

**Diploma/Master Students:**