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

**Scope of Work**

**Friedrich-Alexander-Universität Erlangen-Nürnberg**

**Erlangen Centre for Astroparticle Physics**

**Alexander Kappes**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **1** (1 0 3)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | KAPPES, ALEXANDER | Administration | PubComm Member |  0.10 |   |   |   |  | 0.10 |
|  |  | Administration | ExecCom Member |  0.20 |   |   |   |  | 0.20 |
|   | **KAPPES, ALEXANDER Total** |  | **0.30** |  |  |  |  | **0.30** |
| GR | Altmann, David  | Reconstruction/ Analysis tools | Track reconstruction |  |  |  |  | 0.10 | 0.10 |
|  | **Altmann, David Total**  |  |  |  |  |  | **0.10** | **0.10** |
|  | CLASSEN, LEW | Simulation Programs  | multi-PMT DOM development and simulations |  |  |  |  | 0.40 | 0.40 |
|  | **CLASSEN, LEW Total**  |  |  |  |  |  | **0.40** | **0.40** |
|  | TSELENGEDOU, MARIA | Simulation Programs  | Implementation of mDOM simulation into IceTray | 0.20 |  |  |  |   | 0.20 |
|  |  |  | **0.20** |  |  |  |  |  **0.20** |
| **Erlangen Total** |  |  | **0.50** |  |  |  |  **0.50** | **1.00** |

**Faculty:**

Alexander Kappes – Institutional Lead, Chair of Pubcom Committee and member of the Exec Committee

**Scientists and Post Docs:**

**Ph.D. Students:**

David Altmann – improving track reconstruction, point sources

Thesis/Analysis topics: search for point sources in the southern sky

Lew Classen - multi-PMT DOM development and simulations

Thesis/Analysis topics: Development of multi-PMT DOM prototype

Maria Tselengidou - MICA, proton decay, implementation of mDOM simulation into IceTray

Thesis/Analysis topics: Proton-decay studies for MICA with multi-PMT DOMs

**Diploma/Master students:**

Sebastian Fiedlschuster - Hole ice implementation into clsim, PINGU flasher studies