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

**Scope of Work**

**Uppsala University**

**Olga Botner**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **5** (3 2 2)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | BOTNER, OLGA | Administration | Outreach | 0.05 |  |  |  |  | 0.05 |
|  |  |  | Spokesperson | 0.30 |  |  |  |  | 0.30 |
|  |  |  | ExecCom Member | 0.20 |  |  |  |  | 0.20 |
|  | **BOTNER, OLGA Total** | |  | **0.55** |  |  |  |  | **0.55** |
|  | de los HEROS, CARLOS | Physics Filters | WIMP WG Lead |  |  |  | 0.25 |  | 0.25 |
|  |  | TFT Coordination | TFT Board member |  |  |  | 0.10 |  | 0.10 |
|  | Administration | Pubcom member | 0.10 |  |  |  |  | 0.10 |
|  | **de los HEROS, CARLOS Total** | |  | **0.10** |  |  | **0.35** |  | **0.45** |
|  | HALLGREN, ALLAN | Administration | Outreach | 0.05 |  |  |  |  | 0.05 |
|  |  | Speakers Comm member | 0.10 |  |  |  |  | 0.10 |
|  | TFT Coordination | TFT Chair |  |  |  | 0.25 |  | 0.25 |
|  | **HALLGREN, ALLAN Total** | |  | **0.15** |  |  | **0.25** |  | **0.40** |
| PO | EULER, SEBASTIAN | Computing Resources | Work on computing resources |  |  | 0.20 |  |  | 0.20 |
|  | **EULER, SEBASTIAN Total** | |  |  |  | **0.20** |  |  | **0.20** |
| GR | BURGMAN, ALEXANDER | Detector Monitoring | Monitoring Shifts |  | 0.03 |  |  |  | 0.03 |
|  | LISA UNGER | Detector Monitoring | Tools development |  | 0.10 |  |  |  | 0.10 |
|  | **GR Total** | |  |  | **0.13** |  |  |  | **0.13** |
| **UU Total** | |  |  | **0.80** | **0.13** | **0.20** | **0.60** |  | **1.73** |

**Faculty:**

Olga Botner – Institution lead, IceCube Spokesperson, ExecCom, Outreach, Mentoring students

Allan Hallgren – SpeakersCom, ICB, TFT Chair, Outreach, Mentoring students

Carlos de los Heros – WIMP-wg lead, TFT board member, PubComm member

**Scientists and Postdocs:**

David Boersma – 10%

Sebastian Euler – Computing resources

Analysis topics: Simulations for surface veto and high energy extension

**Ph.D. Students:**

Alexander Burgman – TBD

Thesis/analysis topics: TBD

Lisa Unger – Monitoring software development

Thesis: Fermi bubbles

**Diploma/Master Students:**

**General:**

The Uppsala group uses Swedish GRID resources for IceCube activities; this usage could be extended.