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

**Scope of Work**

**Uppsala University**

**Olga Botner**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **3** (3 0 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 | BOTNER, OLGA | Administration | Outreach | 0.05 |  |  |  |  |  | 0.05 |
|  |  |  | ExecCom Member | 0.20 |  |  |  |  |  | 0.20 |
|  | **BOTNER, OLGA Total** | |  | **0.25** |  |  |  |  |  | **0.25** |
|  | de los HEROS, CARLOS | Online Filter (Pnf) | TFT Board member |  | 0.10 |  |  |  |  | 0.10 |
|  | Administration | Pubcom member | 0.10 |  |  |  |  |  | 0.10 |
|  | **de los HEROS, CARLOS Total** | |  | **0.10** | **0.10** |  |  |  |  | **0.20** |
|  | HALLGREN, ALLAN | Administration | Outreach | 0.05 |  |  |  |  |  | 0.05 |
|  | Online Filter (Pnf) | TFT Chair |  | 0.25 |  |  |  |  | 0.25 |
|  | **HALLGREN, ALLAN Total** | |  | **0.05** | **0.25** |  |  |  |  | **0.30** |
| GR | BURGMAN, ALEXANDER | Detector Monitoring | Monitoring Shifts |  | 0.03 |  |  |  |  | 0.03 |
|  |  | Core Software | Software strike team |  |  |  |  | 0.25 |  | 0.25 |
|  | LISA UNGER | Detector Monitoring | Monitoring Shifts |  | 0.03 |  |  |  |  | 0.03 |
|  | **GR Total** | |  |  | **0.06** |  |  | **0.25** |  | **0.31** |
| **UU Total** | |  |  | **0.40** | **0.41** |  |  | **0.25** |  | **1.06** |

**Faculty:**

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

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

Carlos de los Heros – TFT board member, PubComm member, Mentoring students

**Ph.D. Students:**

Alexander Burgman – Software strike team

Thesis/analysis topics: Magnetic Monopoles

Lisa Unger – Monitoring software development

Thesis: Fermi bubbles

**Diploma/Master Students:**

**General:**

IceCube uses Swedish GRID resources for IceCube activities.

**Uppsala Computing Resources**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **2017** | | **2018** | |
|  | **CPU Cores** | **GPU Cards** | **CPU Cores** | **GPU Cards** |
| Pledged resources in the IceCube common cluster | 10 | 0 | 10 | 0 |