**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 |
|   |  |  | Spokesperson | 0.50 |  |  |  |  |  | 0.50 |
|   |  |  | ExecCom Member | 0.20 |  |  |  |  |  | 0.20 |
|   | **BOTNER, OLGA Total** |  | **0.75** |  |  |  |  |  | **0.75** |
|   | 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** |  |  |  |  | **0.40** |
| GR | BURGMAN, ALEXANDER | Detector Monitoring | Monitoring Shifts |   | 0.03 |  |  |  |  | 0.03 |
|  |  | Core Software | Software strike team |  |  |  |  | 0.25 |  | 0.25 |
|  | LISA UNGER | Detector Monitoring | Tools development |   | 0.10 |  |  |  |  | 0.10 |
|   | **GR Total** |  |  | **0.13** |  |  | **0.25** |  | **0.38** |
| **UU Total** |  |  | **0.90** | **0.48** |  |  | **0.25** |  | **1.63** |

**Faculty:**

Olga Botner – Institution lead, IceCube Spokesperson, 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:**

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

**Uppsala Computing Resources**

Local UPPMAX cluster allocates 2000 core-hours per month, valid until mid-2017. The cluster comprises a total of 2560 CPU cores (no GPUs).