**IceCube Institutional Memorandum Of Understanding (M&O)**

**Scope of Work**

**Stockholm University**

**Klas Hultqvist**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **5** (5 0 4)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | HULTH,  PER OLOF | Education and outreach | Organization of outreach  events in Stockholm | 0.05 |  |  |  |  | 0.05 |
|  |  | Detector Monitoring | IceCube camera system |  | 0.10 |  |  |  | 0.10 |
|  | **HULTH, PER OLOF Total** | |  | **0.05** | **0.10** |  |  |  | **0.15** |
|  | HULTQVIST, KLAS | Administration | ICB Member | 0.05 |  |  |  |  | 0.05 |
|  |  | Physics Filters | Diffuse WG Co-Chair |  |  |  | 0.25 |  | 0.25 |
|  | **HULTQVIST, KLAS Total** | |  | **0.05** |  |  | **0.25** |  | **0.30** |
|  | WALCK, CHRISTIAN | Administration | Publications bookkeeping and author lists | 0.10 |  |  |  |  | 0.10 |
|  | **WALCK, CHRISTIAN Total** | |  | **0.10** |  |  |  |  | **0.10** |
|  | FINLEY,  CHAD | Administration | ICB Member | 0.05 |  |  |  |  | 0.05 |
|  |  | Administration | Coordination with LIGO | 0.10 |  |  |  |  | 0.10 |
|  |  | Physics Filters | WG Lead – Point Source |  |  |  | 0.25 |  | 0.25 |
|  | **FINLEY, CHAD Total** | |  | **0.15** |  |  | **0.25** |  | **0.40** |
|  | BOHM,  CHRISTIAN | Physics Filters | Track Engine |  |  |  | 0.10 |  | 0.10 |
|  | **BOHM, CHRISTIAN Total** | |  |  |  |  | **0.10** |  | **0.10** |
| SC | SU SC | Computing Resources | Computing Resources |  |  | 0.10 |  |  | 0.10 |
|  | **SU SC Total** | |  |  |  | **0.10** |  |  | **0.10** |
| GR | AHRENS,  MARYON | Physics Filters | PhD-related work |  |  |  | 0.10 |  | 0.10 |
|  | **DANNINGER, MATTIAS Total** | |  |  |  |  | **0.10** |  | **0.10** |
|  | ZOLL, MARCEL | Physics Filters | Filter & Simulation |  |  |  | 0.15 |  | 0.15 |
|  | **ZOLL, MARCEL Total** | |  |  |  |  | **0.15** |  | **0.15** |
|  | FLIS,  SAMUEL | Simulation Programs | DOM simulation |  |  |  |  | 0.15 | 0.15 |
|  | **FLIS, SAMUEL Total** | |  |  |  |  |  | **0.15** | **0.15** |
|  | WOLF,  MARTIN | Reconstruction & Analysis Tools | STTools, EventViewer |  |  |  |  | 0.20 | 0.20 |
|  | **WOLF, MARTIN Total** | |  |  |  |  |  | **0.20** | **0.20** |
|  | SU GR | Detector Monitoring | Detector Monitoring |  | 0.06 |  |  |  | 0.06 |
|  | **SU GR Total** | |  |  | **0.06** |  |  |  | **0.06** |
| **SU Total** | |  |  | **0.35** | **0.16** | **0.10** | **0.85** | **0.35** | **1.81** |

**Faculty:**

Per Olof Hulth – (0.50 FTE for IceCube) - Former spokesperson, Organization of outreach

events in Stockholm (0.05), Detector Monitoring-IceCube camera system (0.10)

Klas Hultqvist – (0.60 FTE for IceCube) - Institution lead, ICB member (0.05), WG Diffuse & atm. (0.25)

Christian Walck - (0.50 FTE for IceCube) – Publications Bookkeeping (0.10)

Christian Bohm - (0.10 FTE for IceCube) - Track engine (0.10)

Chad Finley – (0.75 FTE for IceCube) – ICB Member (0.05), WG point source (0.25), coordination with LIGO (0.1)

**Ph.D. Students:**

Maryon Ahrens – (0.50 FTE for IceCube) *–* TBD

Thesis/Analysis topics: TBD

Marcel Zoll - (0.50 FTE for IceCube) - Trigger and simulation (0.15)

Thesis/Analysis topics: IC86 solar WIMPs

Samuel Flis – (0.50 FTE for IceCube) – DOM simulation (0.15)

Thesis/Analysis topics: GC WIMPs/Diffuse

Martin Wolf – (0.50 FTE for IceCube) – STTools, EventViewer, cluster job submission tool (0.20)

Thesis/Analysis topics: GC WIMPs/Point

**Diploma/Master Students:**

Malte Ehrlén- Low energy reconstruction

Alvin Gavel- PINGU sensitivity