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

**Scope Of Work**

**Universite Libre de Bruxelles**

**Juan Antonio Aguilar Sanchez**

**Ph.D Scientists** (Faculty Scientist/Post Doc Grads): **3** (1 2 3)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | AGUILAR SANCHEZ, JUAN ANTONIO | Physics Filters | Muon working group co-Chair |  |  |   | 0.25 |   | 0.25 |
|  | Data Quality | Data and Simulation Quality |  |   |   |   | 0.15  | 0.15 |
|  | Simulation Production | Simulation coordination board member |  |  | 0.10 |  |  | 0.10 |
|  |  | Reconstruction/ Analysis tools | GRB, point-sources |  |  |  |  | 0.10 | 0.10 |
|  | **AGUILAR, JUANAN Total** |  |  |  | **0.10** | **0.25** | **0.25** | **0.60** |
| PO | O’Murchadha, Aongus | Engineering and R&D Support | EMI Measurements | 0.10 |  |  |  |  | 0.10 |
|  | **PO Total** |  | **0.10** |  |  |  |  | **0.10** |
| CS | Amary, Samir | Simulation Production | Simulation Production Site Manager at ULB |   |   | 0.10 |   |   | 0.10 |
|  | **PO Total** |  |  |  | **0.10** |  |  | **0.10** |
| GR | ULB GR | Monitoring | Monitoring Shifters |  | 0.12 |  |  |  | 0.12 |
|  | Heereman, David | Data Acquisition | Develop Hit Spooling for Supernova & others |  | 0.50 |  |  |  | 0.50 |
|  | Pinat, Elisa | Data Acquisition  | DAQ  |  | 0.50 |  |  |  | 0.50 |
|  | Ansseau, Isabelle  | Physics Filters | Vertical event filter |  |  |  | 0.20 |  | 0.20 |
|  | **ULB GR Total** |  |  | **1.12** |  | **0.20** |  | **1.32** |
| **ULB Total** |  |  | **0.10** | **1.12** | **0.20** | **0.45** | **0.25** | **2.12** |

**Faculty:**

Juan Antonio Aguilar – Muon WG co-lead. Data and simulation comparison at analysis level, GRB database, Final data selection for point sources, Simulation coordination board member

**Scientists/post-docs:**

Aongus O’Murchadha – ARA/IceCube

 Analysis topics: ARA data analysis

Kevin Meagher – Service: TBD

 Analysis topics: TBD

**Graduate Students**

David Heereman - IceCube Supernova Hitspooling – will graduate in June 2015

 Thesis/Analysis topics: Supernova detection

Elisa Pinat - Next-Gen IceCube / PINGU Communication Systems Development

 Thesis/Analysis topics: Search for neutrino emission from extended regions

Isabelle Ansseau – Vertical event filter

 Thesis/Analysis topics: Analysis on earth wimps dark matter

Christoph Raab – Service: TBD

 Thesis/Analysis topics: TBD

**Computer Scientists:**

Samir Amary – Computer Scientist