IceCube Institutional Memorandum Of Understanding (MOU)

Scope of Work

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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 | MONTARULI, TERESA | Administration | | ICB member  UHECR’neutrino coordinator | | 0.20 |  | |  |  |  | | 0.20 |
|  | MONTARULI, TERESA Total | | | | | 0.20 |  | |  |  |  | | 0.20 |
| PO | HELLER, MATTHIEU | Simulation Programs | | Update of Neutrinoflux | |  |  | |  |  | 0.20 | | 0.20 |
|  |  | Data Quality | | Data and Simulation Quality | |  |  | |  |  | 0.05 | | 0.05 |
| HELLER, MATTHIEU Total | | | | |  |  | |  |  | 0.25 | | 0.25 |
| GR | CHRISTOV, ASEN | Physics Filters | | L3 Filter for point sources | |  |  | |  |  | 0.30 | | 0.30 |
|  | Data Quality | | Data and Simulation Quality | |  |  | |  |  | 0.10 | | 0.10 |
|  | ASEN CHRISTOV Total | | | | |  |  | |  |  | 0.40 | | 0.40 |
|  | BRON, STEPHANIE | Detector monitoring | | Detector monitoring | |  | 0.10 | |  |  |  | | 0.10 |
|  | Physics Filters | | MESE filtering | |  |  | |  | 0.20 |  | | 0.20 |
|  | Data Quality | | Data and Simulation Quality | |  |  | |  |  | 0.30 | | 0.30 |
|  | STEPHANIE BRON Total | | | | |  | 0.10 | |  | 0.20 | 0.30 | | 0.60 |
|  | CARVER, TESSA | | Detector monitoring | | Detector monitoring |  | 0.10 |  | |  |  | 0.10 | |
| Physics Filters | | Muon filter |  |  |  | | 0.20 |  | 0.20 | |
| Data quality | | Data and simulation Quality |  |  |  | |  | 0.30 | 0.30 | |
|  | TESSA CARVER Total | | | | |  | 0.10 | |  | 0.20 | 0.30 | | 0.60 |
| DPNC Total DPNC Total | | | | | | 0.20 | 0.20 | |  | 0.40 | 1.25 | | 2.05 |

Faculty:

DPNC Geneva

Teresa Montaruli

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

Teresa Montaruli – collaboration board, coordination the UHECR-neutrino working group, supervising DPNC analysis, neutrinoflux update

Scientists and Post Docs:

Matthieu Heller - Supervising of students, neutrino flux update.

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Sofia Vallecorsa and Juanan Aguilar terminated their contracts with DPNC respectively in Feb 28, 2015 and Nov. 30, 2014 (Juanan moved as PI in Brussels). Rameez will defend his PhD Thesis on Apr. 27, 2016. Asen Christov should defend in September.

Ph.D. Students:

Asen Christov – AGN flare analysis, UHECR-HESE analysis.

Thesis/analysis topics: Searches for cosmic neutrinos in coincidence with UHECRs and online analysis of AGN flares with IceCube, foreseen in July 2016.

Mohamed Raameez – LowUp\_13 filter responsible and L2 and L3 responsible for WIMP analysis for the Sun. Data Quality monitoring, Low energy and Muon filter, adaptation of point source methods to WIMP analysis from the Sun.

Thesis/analysis topics: Point-source and solar dark-matter searches with multiple years of IceCube data, foreseen in March 2016.

Tessa Carver – Monitoring shifts, PSLab translation in python., cascade filtering. Started in Aug. 2015.

Thesis/analysis topics: Point-source searches with multiple years of IceCube data, cascade reconstruction and filtering

Stephanie Bron – in training phase.

Diploma/Master Students: