

WORKING GROUP 10

Activities of the Astroparticle Physics International Committee (IUPAP WG 10)

September 2014 – September 2015

Michel Spiro (Chair of ApPIC)

After our plenary meeting on May 2014 on High Energy Multi-messenger Astronomy and on Data Policy in Astroparticle Physics, starting with High Energy Messenger Astronomy, I reported to APIF (The Astroparticle Physics International Forum of concerned Funding Agencies) the outcome of our meeting, which can be found in the 2013-2014 IUPAP WG 10 report.

We agreed with the Funding agencies that ApPIC should report to the community on these main conclusions, before coming back to the Funding Agencies.

This was done on three main occasions:

- An ApPIC IUPAP WG10 report to the 2nd International meeting for large neutrino infrastructure (meeting jointly organized by ICFA neutrino panel IUPAP WG1 and ApPIC IUPAP WG 10) on April 21, 2015
- An ApPIC IUPAP WG10 report to the International Cosmic Ray Conference in Den Haag, IUPAP C4 on July 31, 2015
- An ApPIC IUPAP WG 10 report to the TAUP 2015 IUPAP sponsored conference on Astroparticle physics, on September 7, 2015

After some iteration, the messages on Data Policy in Astroparticle Physics, especially for High Energy Multi Messenger Astronomy is the following:

5 tempos:

- A period of Data Validation by the collaboration (typically one or two years maximum) is most often needed. It can be used to define a priori the analysis criteria for certain searched (so called blind analysis)
- First data releases could be for joint analysis by collaborations: for combinations and mutual cross-check, for complementary approaches,
- Open alerts (for collaborations on multi-messenger astronomy) are also the first step,
- The next step is Data in open access for the concerned community (this needs the community to be prepared with virtual observatories, help-desk for data and codes to avoid false discoveries)
- Data preservation and legacy should also be considered from the beginning.

Few remarks:

- Give proper credit by quoting the used data release (collaborations)

- There is always competition (e.g. for funding opportunities, fame, ...) but there must be also consensus on sharing of data, know-how,...
- Memorandum of Understanding (bottom-up initiated and science driven) should be signed at the very beginning by the Funding Agencies, with attached resources on these issues of open data policy

ApPIC should now hopefully report soon to APIF on these conclusions and will enlarge its discussion to other field of Astroparticle Physics, starting first with its interplay with observational cosmology. The goal, at the end would be to produce a position paper on data policy, exchange of codes and know-how in the field of Astroparticle Physics , taking into account recommendations and practices in America, Europe and Asia.

Appendix: **MEMBERSHIP**

Chair: Michel Spiro, France

Secretary: Pierre Binetruy, France

Roger Blandford, USA

Zhen Cao, China

Eugenio Coccia, Italy

Don Geesaman, USA

Kunio Inoue, Japan

Naba Mondal, India

Angela Olinto, USA

Natalie Roe, USA

Sheila Rowan, GB

Valery Rubakov, Russia

Bernard Sadoulet, USA

Subir Sarkar, GB/Denmark

Christian Spiering, Germany

Yoichiro Suzuki, Japan

Karl-Heinz Kampert, Germany, ex-officio as C4 Chair

Ani Aprahamian, USA, Associate member (C12)