

Prof. Giuseppe Longo - Academician UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II OLO DELLE SCIENZE E DELLE TECNOLOGIE - FACOLTÀ DI SCIENZE MM.FF.NN.

DIPARTIMENTO DI SCIENZE FISICHE



Prof. F. Pasian **President IVOA** Osservatorio Astrofisico di Trieste – INAF Via G.B. Tiepolo 11 Trieste

Dear Fabio,

As agreed during the last INTEROP meeting in Baltimore, some contacts were undertaken with a group of scientists (among the others, D. de Young, K. Borne, A. Lawrence, etc.) involved in the development of the VO middleware and infrastructure, who think that it could be worth to explore the possibility of forming an IVOA interest group focused on "Data Mining and Visualization".

As you well know, the extraction of information from massive data sets is a highly non trivial problem which is at the very core of the VObs. Its solution requires the adoption of innovative technologies and a strict interaction between the "data miners" and the computer scientists who are developing the VObs infrastructure to solve a variety of problems. From scalability issues (calling for methods which are paradigm (cloud vs GRID) independent), to security (proprietary vs public data), to advanced multi-dimensional visualization (client vs server side tools) etc..

One additional aspect which I would like to emphasize is that the implementation of sound DM techniques inside the VObs would open the possibility to export the VObs technology also to other scientific (and non-scientific as well) communities which are facing problems similar to those encountered by the astronomical community in the last decade.

I therefore kindly ask you to explore the possibility of starting an IVOA IG on these topics.

Best regards

Prof. Giuseppe Longo (referent)

Giareffe Loupo

Naples, December 9, 2008