

## Report of the Third Meeting

ICRANet Scientific Committee Meeting  
November 19-20, 2008  
ICRANet - Pescara

Those present:

Carlo Luciano Bianco (Representative of ICRA)

João Braga (representative of Brazil)

Riccardo Giacconi (Representative of Italy, Chairman)

Sergei Matinyan (Representative of Armenia)

Fulvio Melia (Representative of University of Arizona, Tucson) substituted by She-Sheng Xue

John Mester (Representative of Stanford University, Co-Chairman)

William Stoeger (Representative of the Vatican) substituted by Hagen Kleinert

Also in attendance:

Aniello Francesco Izzo (Auditor of ICRANet)

Remo Ruffini (Director of ICRANet)

Federica Di Bernardino (Secretary of ICRANet)

See Enclosure 1 for the proxy documents.

The meeting started at 10.30 am on November 19<sup>th</sup>, following the enclosed schedule (Enclosure 2). The Chairman welcomes Prof. João Braga, representative of Brazil, who just joined ICRANet.

The following considerations have resulted from this meeting.

The Scientific Report covers the year 2008 of activity.

The Scientific Committee expressed appreciation for the adjournment of the Faculty, of the Adjunct Faculty, of the Lecturers, of the Research Scientists, of the Short Term and Long Term Visiting Scientists and of the Administrative Staff of ICRANet described in the 2008 scientific report (Enclosure 3). Particularly appropriate appears to be the appointment of the Adjunct Faculty. The Committee also considered in a very positive light the intense visitor program with many scientists from North and South America, Asia, South-East Asia, India, Europe, Australia and New Zealand.

The topics of research have been presented by the scientists of ICRANet in the Report of the Director 2008 hereby enclosed and summarized in 20 oral presentations at this meeting. In each of these we recognize the high level of research activity with numerous publications in international scientific journals as well as communications presented in international meetings.

Special mention should be made of the international meetings sponsored and/or organized by ICRANet:

- **The Fifth Sino-Italian Workshop on Relativistic Astrophysics** from May 28<sup>th</sup> to June 1<sup>st</sup> 2008 held in Taipei and Hualien, Taiwan;
- **The First Mediterranean Conference on Nonlinear Dynamics and its Applications** from July 3<sup>rd</sup> to July 8<sup>th</sup> held in Pescara;
- **The Third Stueckelberg Workshop on Relativistic Field Theories** from June 8<sup>th</sup> to July 19<sup>th</sup> 2008 held in Pescara;

In addition, ICRANet has sponsored:

- **The II Kolkata Conference on “Observational Evidence for Black Holes in the Universe”** from February 10<sup>th</sup> to February 17<sup>th</sup> held in Kolkata, India;
- **The XIII Brazilian School of Cosmology and Gravitation** from July 20<sup>th</sup> to August 2<sup>nd</sup> held in Mangaratiba (Rio de Janeiro).

Similar activity is expected to be further extended in forthcoming years:

- **The 12<sup>th</sup> Marcel Grossmann Meeting** to be held in Paris from July 12<sup>th</sup> to July 18, 2009. This meeting will occur as one of the high points of the celebration of the 2009 Year of the Astronomy, recently announced by UNESCO under the proposal of the Italian government.
- **The First Galileo-Xu Guangqi Meeting** to be held in Shanghai, China, from October 26<sup>th</sup> to October 30<sup>th</sup>, 2009..
- **The Sobral Meeting** to be held in Fortaleza and Sobral, Brazil, from May 26<sup>th</sup> to May 29<sup>th</sup>, 2009.
- **The International Conference in Honor of Ya. B. Zeldovich 95<sup>th</sup> Anniversary** to be held in Minsk, Belarus, from April 20<sup>th</sup> to April 23<sup>rd</sup>, 2009.
- **The 6<sup>th</sup> Sino-Italian Workshop** to be held in Pescara from June 25<sup>th</sup> to July 3<sup>rd</sup>, 2009.
- **The 11<sup>th</sup> Italo-Korean Meeting** to be held in Korea in October 2009.
- Two meetings celebrating the United Nations Year of Astronomy 2009 in Armenia and New Zealand.

Of special importance is the PhD Program. As explained previously, since ICRANet does not grant academic degrees, a special program has been set up with the participation of European universities. ICRANet has sponsored the International Relativistic Astrophysics PhD program, the IRAP-PhD, with the participation of: ETH Zurich, Freie Universität Berlin, Université de Nice Sophia Antipolis, Università di Ferrara, “Sapienza” Università di Roma, and Université de Savoie. The committee particularly recognizes the successful teaching activities of the IRAP-PhD for the years 2005, 2006, 2007 and 2008. An official ceremony of attribution of the degrees is planned for November 21<sup>st</sup> 2008 in Nice.

The Scientific Committee also welcomes the actions of the Director to promote the entrance of Hungary and New Zealand into ICRANet. The entrance of New Zealand has been considered in order to foster the formation of a research group around Prof. Roy Kerr and further establish direct contacts with scientists in the southern hemisphere. This step by ICRANet follows the multi-year activity successfully begun between ICRA and research centers in Chile (CECS in Valdivia) and Western Australia (University of Nedlands in Perth). All these activities are strongly supported by the Committee.

The Committee also has heard with satisfaction the starting of the works at Villa Ratti in Nice (France). This progress in the establishment of the ICRANet center at Villa Ratti in Nice, France, in order to maximize contacts with other European countries and more generally with countries all over the world. The existence of a well connected airport and the presence of electronic backbones for internet communication are all important elements, which add to the decision of the Nice Municipality to offer the historical Villa Ratti as a seat for ICRANet in Nice. The first stone for the restructuring of the Villa was laid down in the presence of the Minister of State Christian Estrosi, the Mayor of Nice Jacques Peyrat and the ICRANet Director Remo Ruffini on November 23, 2007.

The Committee supports the signature by the Director of the agreements with the State University of Rio de Janeiro (Universidade do Estado do Rio de Janeiro, UERJ). This agreement complements the ones already in action with the University of Nice Sophia Antipolis, and with the University of Rome “La Sapienza”. The Committee recognizes that these collaborations are crucial in order to

give to ICRANet scientists the opportunity to teach courses and give lectures in the universities and, vice versa, to provide to the faculty of these universities the opportunity to spend research periods at ICRANet institutions. The Committee also recognizes the desirability of agreements with research institutions in member states, e. g. the one already signed with ENEA in Italy and the one proposed to INFN in Italy.

The Committee visited the new facilities of the seat of Pescara and welcomes the completion of the new basement space dedicated to a library and common discussion rooms. Also welcome is the creation of a small open air amphitheater dedicated to lectures, including public ones, in the summer, spring and autumn.

The Scientific Committee especially approves that all scientific activities of ICRANet have focused consistently on the theoretical consequences of Einstein's Theory of General Relativity, which by Statute is the basis for the ICRANet scientific activities. It welcomes the outstanding researches in so many complementary fields, which have led to publications in the international literature, meetings and books. It also supports giving special attention to graduate students as well as to a vigorous postdoctoral program and to an outreach program connected with the United Nations 2009 Year of Astronomy.

In conclusion, the Committee expresses its satisfaction for the high level of scientific activities demonstrated in these first three years of activities of ICRANet. It takes due note that the recommendations expressed last year to develop a program of outreach, to help to explain to the larger community the scientific results it has obtained, has indeed been implemented in the many activities programmed for the United Nations 2009 Year of Astronomy. It also welcomes that the comparison of actual data with the various theoretical investigations developed at ICRANet has indeed been implemented, as the Supernova-GRB observational activities has recently demonstrated.

The Scientific Committee further notes that now that the ICRANet sponsored IRAP-PhD program has reached a milestone of maturity with the granting of eight PhD degrees, it is incumbent upon ICRANet to support opportunities for young scientists to access the wider research community. The Scientific Committee notes as well that it would be important to give to the PhD students a specific training in giving effective presentations to non-expert listeners.

Finally, the Scientific Committee takes note with satisfaction that its recommendation to the Board for an increase of funding for the year 2009 and following, presented in the last meeting, has been accepted and strongly supported by the Board, and transmitted to the competent Ministries. It recommends that all the effort be put in a successful accomplishment of this task, which is indeed essential for the continuation of the researches of ICRANet, in view of its geographical expansion and of the corresponding necessary expansion of the Faculty, as well as of the above mentioned postdoctoral and visitors programs.

The Meeting ended at 12.30 pm on November 20<sup>th</sup>, 2008 after reading and unanimous approval of this report. The Committee then transferred to Nice (France) for the activities related to the IRAP-PhD program and for the visit to the ICRANet seat.



Prof. Riccardo Giacconi  
Chairperson of the Scientific Committee of ICRANet