

Buenos Aires, January 20, 2009

Second Announcement

International Meeting on

HIGH ENERGY PHENOMENA IN RELATIVISTIC OUTFLOWS II

Buenos Aires city, October 26-30, 2009

<http://hepro2.iar-conicet.gov.ar/>

We apologize if you receive this announcement more than once. Next announcements will be sent only to registered participants.

Important news:

1. Registration and abstract submission is open through the web page.
2. Preliminary list of invited speakers is available.
3. Hotel packages at special prices.
4. Invited and contributed papers will be published in the International Journal of Modern Physics D.

After the successful workshop on High Energy Phenomena in Relativistic Outflows (HEPRO) held in Dublin in September 2007, a second meeting on similar topics will be held in Buenos Aires, Argentina, in October 2009. HEPRO II will be devoted to the comprehensive discussion of recent theoretical, phenomenological, and observational developments in the field of high-energy phenomena related, in one way or another, to the objects containing relativistic winds and jets. In this regard, the discussion of the recent gamma-ray observations, as well as the multi-wavelength properties of galactic and extragalactic jet sources will be covered by several review talks. We also plan to have a significant number of invited talks on different aspects of the theory of gamma-ray sources, including magnetohydrodynamics, particle acceleration, and radiation in relativistic outflows.

We expect that new and stimulating results and progress reports from ground-based detectors (HESS I/II, MAGIC I/II, VERITAS) and space-borne gamma-ray detectors (AGILE, Fermi/GLAST, INTEGRAL, SWIFT), as well as X-ray telescopes like Chandra, XMM, and Suzaku, will be presented and discussed at the meeting. As in HEPRO I, there will be presentations of recent original theoretical and phenomenological studies as invited and contributed talks. We

hope to cover the basic theoretical topics of the rapidly developing field with an emphasis on the non-thermal high-energy phenomena related to all known galactic and extragalactic source populations with relativistic jets and outflows: microquasars, pulsar winds, active galactic nuclei, and gamma ray bursts. The feedback between observers and theoreticians will be an important ingredient of the meeting. We also expect some discussion about the future of the field in the light of planned instruments (CTA, AGIS, HAWC, Simbol-X, etc).

Review, invited, and contributed papers will be published in the International Journal of Modern Physics D (all papers will be subjected to peer review).

The meeting will be hosted by the Group of Relativistic Astrophysics and Radio Astronomy (GARRA), the Instituto Argentino de Radioastronomía and Observatory of La Plata, under the auspices of the Argentine Astronomical Society (AAA) and the National Research Council (CONICET) of Argentina.

The talks will take place in the Main Lecture Room of the Aspen Towers Hotel, in the very centre of Buenos Aires City. It can accommodate up to 140 people. There will be a separated room for posters and another one for informal discussion (e.g. concerning future instrumentation).

Invited speakers include:

J. Arons	Relativistic pulsar winds: recent progress
M. Beilicke	Gamma-ray observations of M87
G. Dubus	How to confine a relativistic pulsar wind by a stellar wind
L. Drury	Recent progress in particle acceleration theory
R. Fender	Jets on all scales: similarities and differences
N. Gehrels	GRBs: recent observational results
E. Gouveia Dal Pino	Galactic jet simulations
D. Khangulyan	Microquasar jet models
S. Komissarov	The formation of relativistic jets
A. Königl	Jets: open problems and challenges
B. Lott	Fermi results on relativistic sources
J. McKinney	The jet/disk connection: theoretical aspects
I.F. Mirabel	The jet/disk connection: phenomenology
A. Pozanenko	Overview of GRBs
C. Reynolds	Physical conditions near accreting black holes
H. Spruit	Relativistic outflows
L. Stawarz	Multiwavelength aspects of relativistic jets
F. Tavecchio	Gamma-rays from AGNs
A. Timokhin	Pulsar magnetospheres
Y. Uchiyama	Synchrotron jet emission in quasars
G. Vila	Radiative processes in jets
B. Zhang	Recent progress in GRB theory

A day-long excursion to the countryside is planned, including a Conference Banquet (Argentinian asado) in a "gaucho environment". Post-conference activities like visits to astronomical sites in the North West of the country, of tourism to the Patagonia, Iguazú falls, and other attractions can be organized upon request by the official travel agency Booking Travel.

Hotel packages, at special rates, can be found at:

<http://hepro2.iar-conicet.gov.ar/> → Accommodation & Travel.

These packages include 6 night of hotel, transfer from the airport to your selected hotel, breakfast, city tour (on Sunday 25), and Dinner with a Tango Show.

The registration fee includes welcome cocktail, conference kit, coffee breaks, excursion day, and Conference Banquet, plus proceedings.

The Scientific and Local Organizing Committees are listed below

SOC:

Zulema Abraham (Brazil)
Felix A. Aharonian (Germany/Ireland)
Jonathan Arons (USA)
Gennadi Bisnovatyi-Kogan (Russia)
Paolo Coppi (USA)
Arieh Koenigl (USA)
Laura Maraschi (Italy)
Peter Mészáros (USA)
Félix Mirabel (ESO)
Josep M. Paredes (Spain)
Guy Pelletier (France)
Gustavo E. Romero (Chair – Argentina)
Marek Sikora (Poland)
Marco Tavani (Italy)

LOC:

Ileana Andruchow
Paula Benaglia (Co-chair)
Xavier Bertou
Sergio A. Cellone
Jorge A. Combi
Leonardo J. Pellizza
Gustavo E. Romero
Adrián C. Rovero (Co-chair)

Some important dates to remember:

Early registration deadline: August 1, 2009

Abstract submission deadline: September 1, 2009

Final program: October 1, 2009

Meeting: October 26-30, 2009

Excursion: October 28, 2009

Additional information and details on registration and lodging can be found at the meeting web page (<http://hepro2.iar-conicet.gov.ar/>).

We look forward to seeing you in Buenos Aires!

The organizers.