## III School on Cosmic Rays and Astrophysics

August 25 to September 5, 2008 Arequipa – Perú

#### First Announcement

We are pleased to announce the 3th School on Cosmic Rays and Astrophysics to be held in Arequipa, Peru, from August 25 to September 5, 2008. Arequipa is located south of Lima (Peruvian capital) and it is a Peruvian major tourist destination close to other famous Peruvian sites such as Cusco, Machu Picchu and the lake Titicaca.

The purpose of the School is to promote cosmic ray physics and astrophysics within the Latin American community.

This School aims to provide a comprehensive overview of the theoretical and experimental aspects of Cosmic Ray Physics and Astrophysics. It is open to late-term undergraduate and graduate students, and to researchers interested in reviewing the essentials of these fields. The list of lecture topics includes: experimental techniques; primary spectrum and composition of cosmic rays; high-energy interactions; High energy gamma ray astronomy and GRBs; neutrino astrophysics; cosmic ray detectors; simulation; solar modulation, and present status of the development and results from several present-day observatories such as the Pierre Auger Observatory, IceCube, HESS, KASCADE, etc. These introductory lectures will provide students with a common background, while specialized seminars will give them an updated panorama. Posters will be accepted for presentation by the participants.

The school is organized by the *Universidad Nacional de San Agustín* (<u>UNSA</u>) and by the *Universidad Nacional de Ingenieria* (<u>UNI</u>).

The deadline for an early registration is March 25, 2008. For more information about the registration, financial support, and lecture details please visit the school web page at: <a href="http://www.unsa.edu.pe/cosmicraysschool">http://www.unsa.edu.pe/cosmicraysschool</a>

Any inquiries can be addresses to <u>jbellido@phys.psu.edu</u>. We look forward to receiving many participants from your institution.

Yours sincerely

Jose Bellido

For the organizing committee

# **Lecturers:**

Name	Institution	Lecture
Pasquale Blasi	National Institute for Astrophysics, Italy	High Energy Astrophysics
Ralph Engel	Karlsruhe, Germany	High Energy Cosmic Ray Interactions
Piero Galeotti	University of Torino, Italy	Neutrino Astrophysics
Johanes Knapp	Leeds University, UK	Air Shower Simulation
Silvia Mollerach	Bariloche, Argentina	Techniques for Anisotropy Studies
Giani Navarra	University of Torino, Italy	Detectors of Cosmic Rays, Gamma- Rays and Neutrinos
Stephane Coutu	Pennsylvania State Universiyty, USA	Direct Measurements of Cosmic rays (up to around TeV)
Andrea Santangelo	Eberhard-Karls-Universität Tübingen, Germany	TeV Gamma Ray Astronomy
Gavin Rowell	University of Adelaide, Australia	TeV Gamma Ray Astronomy
Antonella Castellina	University of Torino, Italy	Cosmic Rays up to about the Knee region (10 <sup>15</sup> eV)
Paul Sommers	Pennsylvania State Universiyty, USA	Cosmic Rays above the Knee region
Jose Valdes	UNAM, Mexico	Solar Modulation
Andrew Taylor	Heidelberg, Germany	Links of Highest Energy Cosmic Rays, Neutrinos and Gamma-rays (above 10 <sup>18</sup> eV).

# **Invited Talks:**

Tom Gaisser	Bartol Research Institute, USA	The Ice Cube experiment
Xavier Bertou	Bariloche, Argentina	The LAGO project
Roberto Mussa	University of Torino, Italy	Atmospheric Monitoring
		Techniques Relevant for CR

### **International Advisory Committee:**

- Thomas Gaisser (Bartol Research Institute)
- Alan Watson (Leeds University)
- Felix Aharonian (Heidenberg University)

### **International Organizing Committee:**

- José Bellido (Penn State University-USA, Co-chairman )
- Oscar Saavedra (Universita di Torino-Italy, Co-chairman)
- Johana Chirinos (Michigan Tech University-USA)
- David Wahl (Jicamarca Radio Observatory Perú)
- Alberto Echegoyen (CNEA Argentina)
- Adrian Rovero (Universidad de Buenos Aires Argentina)
- Carlos Escobar (Universidade Estadual de Campinas Brazil)
- Joao de Mello Neto (Universidade Federal do Rio de Janeiro Brazil)
- Joao dos Anjos (Centro Brasileiro de Pesquisas Fisicas-Brazil)
- Ivone Albuquerque (Universidade de Sao Paulo Brazil)
- Arnulfo Zepeda (Cinvestav México)
- Gustavo Medina-Tanco (UNAM México)
- Humberto Salazar (BUAP México)
- Alfonso Velarde (Universidad Boliviana de San Andres-Bolivia)

# **Local Organizing Committee:**

- Rolando Perca Gonzales (Professor UNSA, Coordinator)
- Javier Solano (Professor-UNI)
- Francisco García Calisaya (Head of EPF-UNSA)
- Dante Góngora Manchego (Dean FCNF-UNSA)
- David Pacheco Salazar (Professor EPF-UNSA)
- Roxana Torres Guillén (Professor EPF-UNSA)
- Carmelo Mayta Ojeda (Professor EPF-UNSA)
- Ronald Pastor Rodríguez (Professor EPF-UNSA)
- Edwin Llamoca Requena (Professor EPF-UNSA)