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# **INTERNATIONAL WORKSHOP HEIGHT SYSTEMS, GRAVITY AND GEOID IN SOUTH AMERICA**

*Buenos Aires – Argentina*

*September 25 – 29, 2006*

*Since just a few decades ago, the advance of satellite technology and the computing possibilities made it possible the use of theories for the study of the shape of the Earth, built more than a century ago.*

*On the other hand, the increase in the use of GPS technology requires the urgent need of having solid coordinates for its whole exploitation.*

*These circumstances provoke a great step forward in the investigation about the topic at universities and institutes through the world, not only due to the new scientific view but also as a response to the demand of GPS users in a lot of purposes.*

*The aim of this symposium is providing the professionals and users related to the vertical reference subject matter with a place of updating and discussion of the new tools and technology and its application in South America.*

*The Geoid School, sponsored by the IAG that took place in Rio de Janeiro (Brazil) in 1997, meant an important step forward for the integration of South American scientists into the international geophysic community. Since them, new developments and models have greatly varied the calculation methodology of geoid models, and thus allowing to get other results with the chance of applying them in several scientific disciplines.*

*In this sense, in a joint effort of the IAG Projects CP2-7 (Gravity in South America) and CP2-5 (South American Geoid), this symposium has been organized. Its aim is to update and deepen the knowledge about the terrestrial gravity field which leads to an adequate handling of the vertical reference.*

*The workshop has been organized over the following items:*

- Altimetrical systems and national levelling networks*
- Local and regional geoid models*
- New geopotential and terrain models*
- Different origins of vertical reference systems*

*The development of the activities has been arranged in the following way:*

- Two workshop days for updating of the new methodologies and current models as well as the practical use of these concepts.*
- Two days to inform about the activities, achievements and future prospects in several South American countries through speeches and murals.*
- The last day for discussion and planning of joint activities.*

### **ORGANIZERS:**

*Asociación Argentina de Geofísicos y Geodestas (AAGG)*

*Facultad de Ciencias Exactas, Ingeniería y Agrimensura – Universidad Nacional de Rosario (FCEIA – UNR)*

*Instituto Geográfico Militar (IGM)*

*Facultad de Ciencias Astronómicas y Geofísicas – Universidad Nacional de La Plata (FCAG – UNLP)*

*Escola Politécnica – Universidade de Sao Paulo (EP – USP)*

*International Gravity Field Service - International Association of Geodesy (IGFS-IAG)*

### **SPONSORS:**

*Agencia Nacional de Promoción Científica y Técnica (ANPCyT)*

*Consejo Nacional de Investigaciones Científicas y Técnicas (CONICET)*

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### **ABSTRACT PRESENTATION**

*The deadline for the presentation of abstracts of scientific works has been established until July 15th, 2006. There is also an invitation to present abstracts about projects and current or future activities over the event subject matter. In both cases, the abstracts must not exceed 500 words, pointing out at the top the Title, Author/s, and Places of Origin.*

*The scientific works as well as the communication of activities could be presented orally or by murals, according to the speakers choice.*

*It is planned to edit a volume containing the presented abstracts, which will be handed in at the beginning of the meeting, and also a CD with the whole works, which will be handed in later. It is required from the authors to provide the whole version of their works in ppt, doc or pdf format.*

### **COSTS**

*Fees: US\$ 70.- (equivalent to 210 Argentine pesos)*

*The fee includes coffee breaks, volume of abstracts, the CD with the complete presentations and welcome reception.*

*A limited number of grants have been arranged in order to partially cover the costs of fees and/or trips for South American scientists who present works in the event.*

*Those grants assigned will be given in cash at the beginning of the workshop.*

*Since there is a limited number of vacancies available, it will be given priority to the people who have sent the form for pre inscription to the event. These forms will be received till September 15<sup>th</sup>, 2006.*

*The organizers will confirm to the applicants the corresponding acceptance of their inscription to the event.*

### **CONTACTS**

*To send the abstracts, inscription form or to ask for any kind of information related to the event, please contact: [geoide2006@igm.gov.ar](mailto:geoide2006@igm.gov.ar)*

## **GENERAL INFORMATION**



### **VENUE**

The “Instituto Geográfico Militar” (Military Geographyc Institute) is situated in 381 Cabildo St., in Palermo.

To see the map of the city as well as to get some information about means of transport, it is suggested to visit the following site:

Gobierno de la Ciudad Autónoma de Buenos Aires (<http://www.buenosaires.gov.ar>).



### **TRANSFER FROM THE AIRPORTS**

The city has two airports:

*Aeroparque Jorge Newbery: tourists from inside the country or from bordering countries arrive at Aeroparque Jorge Newbery, located at the riverside road of the city, a few minutes from the town centre.*

*This small airport counts with taxis, private cars, transfers and buses 24 hours a day.*

*International Ezeiza Airport: tourists from the rest of the World arrive at this airport, which is at 20 minutes from the town centre through highway. It also counts with taxis, private cars, transfers and buses 24 hours a day.*

*The Conference will not provide any official transport from the airports.*



### **WEATHER**

*The spring weather in Buenos Aires is quite nice, with an average temperature of about 20° C. It is suggested to take a coat at night since it gets colder.*



### **LANGUAGE**

*The Argentinian oficial language is Spanish. English and Portuguese are spoken by the mnajority of people related to tourism. Besides, the people from the city of Buenos Aires usually understand those who speak Italian without too much difficulty.*



### **MONEY AND CURRENCY**

*The Argentinian coin is the Peso (\$). There are notes of \$ 100, \$ 50, \$ 20, \$ 10, \$ 5 and \$ 2 as well as coins of \$ 1, 50 cents, 25 cents, 10 cents and 5 cents. The American dollar is widely used as an international coin. Money can be changed in banks and money – change offices, where passports are required. Credit cards and dollars are accepted at many shops. The American dollar is accepted in the majority of shops, but it is convenient to turn it into Pesos at banks or money – change offices (about US\$ 1= \$ 3).*



### **VISA**

*South American citizens, as well as American, Canadian, Spanish and British citizens do not need VISA to enter Argentina for a maximum of 90 days, though they have to present their passports up to date. The citizens from neighboring countries, such as Chile, Uruguay, Bolivia, Paraguay and Brazil only need the Identity National Document to enter the country. For the rest of the citizens it is suggested to find out about the VISA at the Argentinian Embassy or Consulate.*



### **ELECTRICITY**

*The Argentinian current has 220 Volts, 50 Cycles of alternating current. The sockets have 2 cilindric or flat holes with earth connection. It is advisable to travel with an adaptor to these sockets in order to use different electrical appliances.*



### **TIMES**

*The time zone corresponds to GMT-3 and it is not modified during the summer. The busy life in Buenos Aires begins very early in the morning and it lasts till very late at night.*

*Shops: they are open from Mondays to Fridays from 9 a.m. to 8 p.m. and on Saturdays from 9 a.m. to 1 p.m. though the stores in the big avenues are also open till 7 or 8 p.m. In the malls the timetable goes from 10 a.m. to 10 p.m., even at weekends and some public holydays.*

*Banks: they open at 10 a.m. and close at 3 p.m. You can draw Money or make some transactions through cash dispensers, which are open 25 hours a day.*

*Meals: the timetable for the four meals is quite varied, since they are adapted to the activities. Breakfast is between 7 a.m. and 10 a.m. It is possible to find coffee, milk and croissants at a very low price in cafés and tearooms, for breakfast as well as for tea time.*



### **SANITARY POLICY**

*There is neither obligation nor need to have any vaccine before entering Buenos Aires, because it is a safe city from the sanitary point of view. Public running water is drinking water. Public hospitals –which are available for tourists are open 24 hours a day for emergencias and are free. The ambulante service for emergencias (SAME) is also free. To have access to the Private Health Service it is suggested to get some kind of traveller's medical assistance.*



### **GASTRONOMY**

*Buenos Aires outstands for the quality of its gastronomy. There are special dishes from different regions and varied native food. The gastronomic areas are well identified. Costanera Norte and Puerto Madero are well-known by their meat. Avenida de mayo is the core of Spanish cuisine. The most tradicional pizzas are on Corrientes St. The areas of Cortazar Square, Palermo Hollywood, Recoleta and Las Cañitas offer gourmet specialities –elaborated, exquisite, exotic dishes. Argentinian wines are famous all over the World. Tips are not usually included.*



### **ACCOMODATION**

*There is a wide variety of accommodation, such as hotels, hostels and apartments. It is suggested to visit <http://www.buenosaires.gov.ar> for further information.*