* ISWI Newsletter - Vol. 4 No. 71 23 June 2012 * * * * I S W I = International Space Weather Initiative * * (www.iswi-secretariat.org) * * Publisher: Professor K. Yumoto, ICSWSE, Kyushu University, Japan * * Editor-in-Chief: Mr. George Maeda, ICSWSE (maeda[at]serc.kyushu-u.ac.jp)* Archive location: www.iswi-secretariat.org (maintained by Bulgaria) [click on "Publication" tab, then on "Newsletter Archive"] * * Caveat: Under the Ground Rules of ISWI, if you use any material from * the ISWI Newsletter or Website, however minor it may seem * * to you, you must give proper credit to the original source. * Attachment(s): (1) "COSPAR_pressrelease2012".....700 KB pdf, 7 pages. (2) "Trends-2012-SecondCircular"...980 KB pdf, 11 pages. ÷ Re: : (1) COSPAR Announcement. : (2) 7th IAGA/ICMA/CAWSES Workshop Announcement. : Dear ISWI Participant: There are two notes below -- and for each note there is an attached pdf. The author of each note asked me to circulate their respective notes. Dear Editor: Attached please find a press release detailing awards to be bestowed by the Committee on Space Research (COSPAR) at its forthcoming Scientific Assembly in Mysore, India, 14 - 22 July 2012. We thank you in advance for helping to diffuse the information or parts of it, as appropriate, in your publications. Do not hesitate to contact the Secretariat should you wish to obtain additional information about COSPAR, its awards, or the 2012 recipients. Yours sincerely, A. Janofsky Associate Director COSPAR Secretariat c/o CNES 2 place Maurice Quentin 75039 Paris cedex 01, France Tel: +33 (0)1 44 76 75 10 Fax: +33 (0)1 44 76 74 37 cospar@cosparhq.cnes.fr http://cosparhq.cnes.fr

Dear colleague:

Note that the deadline for abstract submission has been postponed to June 30.

Please, distribute it among people of your Institute and colleagues who may be interested in attending this Workshop.

Kind regards and looking forward seeing you in Buenos Aires,

Ana

Ana G. Elias Universidad Nacional de Tucuman Facultad de Ciencias Exactas y Tecnologia Departamento de Fisica 4000 Tucuman - Argentina

: If you need something announced, send it my way.

Ever cordially yours,

- : George Maeda
- : The Editor
- : ISWI Newsletter





President: Prof. G.F. Bignami Executive Director : Dr. J.-L. Fellous

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> > **Press Release**

(for immediate release)

Committee on Space Research (COSPAR)

Awards 2012

To be presented on 16 July during the 39th COSPAR Scientific Assembly

14 - 22 July 2012, Mysore, India

See below for complete citations and a brief description of COSPAR.

- <u>COSPAR Space Science Award</u> for outstanding contributions to space science:

Janet Luhmann (USA), Space Sciences Laboratory, University of California, Berkeley, California

- <u>COSPAR International Cooperation Medal</u> for distinguished contributions to space science and work that has contributed significantly to the promotion of international scientific cooperation:

Roger-Maurice Bonnet (France), International Space Science Institute, Bern, Switzerland

- <u>COSPAR William Nordberg Medal</u> commemorating the late William Nordberg and for distinguished contributions to the application of space science in a field covered by COSPAR:

Herbert Fischer (Germany), Institute for Meteorology and Climate Research (IMK-ASF) Karlsruhe Institute of Technology

- <u>COSPAR Harrie Massey Award</u> honoring the memory of Sir Harrie Massey, FRS, for outstanding contributions to the development of space research in which a leadership role is of particular importance:

Neil Gehrels (USA), Astroparticle Physics Laboratory, NASA Goddard Space Flight Center, Greenbelt, Maryland

- <u>COSPAR Distinguished Service Medal</u> for extraordinary services rendered to COSPAR over many years:

Peter Willmore (United Kingdom), School of Physics & Astronomy, University of Birmingham



- <u>Vikram Sarabhai Medal</u> (a joint award of COSPAR and the Indian Space Research Organization) honoring Vikram Sarabhai, one of the architects of modern India, for outstanding contributions to space research in developing countries:

Rafael Navarro-Gonzalez (Mexico), Laboratory of Plasma Chemistry and Planetary Studies, UNAM, Mexico

- <u>Jeoujang Jaw Award</u> (a joint award of COSPAR and the Chinese Academy of Sciences) recognizing scientists who have made distinguished pioneering contributions to promoting space research, establishing new space science research branches and founding new exploration programs:

Robert P. Lin (USA), Space Sciences Laboratory, University of California, Berkeley, California

- <u>Yakov B. Zeldovich Medals</u> (a joint award of COSPAR and the Russian Academy of Sciences) conferred on young scientists for excellence and achievements, honoring the distinguished astrophysicist Yakov B. Zeldovich. One medal is awarded for each COSPAR Scientific Commission:

- COSPAR Scientific Commission A

Jadunandan Dash (India/United Kingdom)

School of Geography, University of Southampton

in recognition of original contributions to monitoring of vegetation dynamics from satellite observations

- COSPAR Scientific Commission B

Bethany L. Ehlmann (USA)

California Institute of Technology Research Scientist and Jet Propulsion Laboratory

for fundamental discoveries of aqueous mineral phases on Mars which have transformed our understanding of aqueous processes on Mars and its potential for habitability

- COSPAR Scientific Commission C

Tatsuhiro Yokoyama (Japan)

Research Institute for Sustainable Humanosphere, University of Kyoto

for his innovative modeling and experimental studies that helped resolve several outstanding problems concerning E and F region coupling processes

- COSPAR Scientific Commission D

Jonathan P. Eastwood (United Kingdom)

The Blackett Laboratory, Imperial College London

for outstanding research into the basic properties of collisionless plasmas in space which has led to a significant advancement of our understanding of magnetic reconnection and collisionless shocks

- COSPAR Scientific Commission E

Makoto Uemura (Japan)

Hiroshima Astrophysical Science Center, Hiroshima University

for his fundamental research in time domain astronomy leading to understanding of the optical and near-infrared signatures of explosive events in the universe

- COSPAR Scientific Commission F

Chiara La Tessa (Italy/Germany)

Biophysics Department, GSI Helmholtzzentrum fuer Schwerionenforschung, Darmstadt

in recognition of her outstanding contribution to the investigation of shielding materials for space radioprotection

- COSPAR Scientific Commission G

Michael Lukasser (Austria)

Vienna University of Technology

for outstanding progress in code development essential for the choice of best parameters for the space experiment JEREMI

- COSPAR Scientific Commission H

Peter J. Wass (United Kingdom)

The Blackett Laboratory, Imperial College London

in recognition of his seminal work on the charging rate of accelerometer proof masses and the limitations on performance of Fundamental Physics missions that arises from cosmic ray charging.

CITATIONS

- COSPAR Space Science Award:

Janet Luhmann (USA)

Dr. Janet G. Luhmann, recipient of this year's COSPAR Space Science Award, is a Senior Fellow at the Space Sciences Laboratory of the University of California Berkeley and the Principal Investigator of the IMPACT suite of instruments on the twin spacecraft STEREO mission. Following her Ph. D. in Astronomy from the University of Maryland, she joined the particles and Fields Department of the Aerospace Corporation in El Segundo California. In 1980 she joined the Institute of Geophysics and Planetary Physics at the University of California, Los Angeles, moving to her current position in Berkeley in 1994.

Janet Luhmann started her career in cosmic ray physics, both observation and theory; at Aerospace she moved into studies of the X-ray fluxes from the Earth's atmosphere; at UCLA she expanded into radar studies of the Earth's Upper Atmosphere and in parallel the interaction of the solar wind with Venus completely changing the paradigms in both fields. From Venus it was a short hop to Mars where she showed how dust storms lead to ionospheric changes due to heating of the upper atmosphere. At Berkeley she moved deeper into the origin of interplanetary disturbances and the structure of the coronal magnetic field as well as leading the development and integration of the IMPACT sensor suite for the STEREO mission, all the while keeping up with her growing interests in the outer planets, especially the study of the interaction of the Saturnian magnetosphere with its moon, Titan, using data from the Cassini mission. Currently in addition to STEREO and Cassini she is studying Venus Express observations and helping prepare the Mars mission, Maven, for its upcoming investigation of the Martian upper atmosphere. She has been a regular contributor to the scientific exchanges of COSPAR Commissions B, C, D, and E for over 30 years and has chaired important panels and committees for the American Geophysical Union, the US National Academy, NASA and IAGA.

She is a most deserving recipient of this award.

- COSPAR International Cooperation Medal:

Roger-Maurice Bonnet (France)

The career of Roger-Maurice Bonnet has been very closely linked to the promotion of international cooperation for at least thirty years. Important ESA projects producing a wealth of findings were

executed during or had their origins in the period when Professor Bonnet headed the ESA Science Directorate. Furthermore, pioneering scientific links with Russia and China were established due to the persistent and personal involvement of Professor Bonnet. The results of his efforts include the very successful Giotto-Vega-Sakigake and Cluster-Double Star missions. The joint Cassini-Huygens mission, which returned spectacular results from Saturn and Titan, also was originally planned under the leadership of Professor Bonnet.

As President of COSPAR Professor Bonnet presided over four very successful COSPAR Scientific Assemblies. Special attention was devoted to encouraging participation by young scientists and students through travel grants, outstanding paper awards, attributing organizational responsibilities, and so forth, all of which rapidly increased attendance by the next generation at the Scientific Assemblies and gave COSPAR a higher profile in a number of countries. The COSPAR Scientific Advisory Committee (CSAC), which helps to identify how best to promote international cooperation, was one of Professor Bonnet's initiatives. The Capacity Building Workshops, greatly developed during his presidency, have also been very effective in promoting international cooperation and active involvement of developing countries in international space research.

Since 2003 Professor Bonnet has lead the International Space Science Institute (ISSI), and made it one of the most effective tools to study particular problems in space science. The scope of topics addressed by ISSI has expanded due to Professor Bonnet's strategic vision, and the Institute's partners have re-enforced their involvement as illustrated by the nomination of a NASA representative to the Board, by the contribution of the Russian Academy of Sciences to the ISSI budget, and by the association to ISSI of the National Space Science Center of China and of the Japanese Center for Planetary Sciences. Professor Bonnet for the last ten years has been the intellectual motor behind these advances. Roger-Maurice Bonnet is, indeed, a most deserving recipient for the 2012 COSPAR International Cooperation Medal.

- COSPAR William Nordberg Medal:

Herbert Fischer (Germany)

Professor Herbert Fischer has been one of the European pioneers of atmospheric remote sensing over the past four decades. In the 1970s whilst at the Institute of Meteorology of the Ludwig Maximilian University in Munich, he began his career and was a scientific investigator on some of the earliest NASA NIMBUS atmospheric remote sensing missions and part of the NASA LIMS team. In the 1980s, he began the development of the Michelson Interferometer for Passive Atmospheric Sounding, MIPAS. After becoming director of the Institute of Meteorology and Climate research at the University of Karlsruhe and Research Center Karlsruhe, he led the MIPAS space proposal, which was selected for flight on the ESA POEM-1, now called the ESA Envisat. MIPAS measures the emission of the atmosphere in thermal infrared spectral region in limb viewing geometry at a high spectral resolution to observe unambiguously trace gas features. Inversion of these measurements yields the amounts and distributions of a variety of trace gas constituents and parameters in the region of the upper troposphere to the thermosphere. In addition, the MIPAS balloon borne and aircraft instruments have been developed and very successfully exploited. Overall a unique set of observations for atmospheric and climate research has been provided. Through his work on MIPAS, Herbert Fischer has become internationally respected. He has developed a world class research institute, training a generation of atmospheric and climate researchers, as well as undertaking much community service in a variety of national and international functions. In conclusion Herbert Fischer is a worthy recipient of the COSPAR Nordberg Medal; he has followed well in Nordberg's steps exploiting the precise measurement of thermal infrared radiation from space to retrieve unique information about atmospheric composition and dynamics during a key phase of the evolving anthropocene.

- COSPAR Massey Award:

Neil Gehrels (USA)

Neil Gehrels received his B.S. (Honors) in physics from the University of Arizona and his Ph.D. in physics from Caltech in 1982. He began his career at Goddard as an experimental physicist working in gamma-ray astronomy, active in instrument development, data analysis, and theory. Dr. Gehrels has been Project Scientist for the Compton Observatory and now is Mission Scientist for INTEGRAL (2002-present) and Deputy Project Scientist for the Fermi Space Telescope (2008-present). Dr. Gehrels is the Principal Investigator for the SWIFT mission and his main interests include gamma-ray bursts and supernovae explosion processes. He now serves as Chief of the Astroparticle Physics Laboratory, NASA/GSFC, is College Park Professor of Astronomy at the University of Maryland, and is Adjunct Professor of Astronomy & Astrophysics, Penn State.

Throughout his career, Dr. Gehrels has been dedicated to advancing high energy astrophysics from space and to increasing our understanding of explosive events in the universe. His pioneering contributions have opened up the gamma-ray range as an astronomical discipline through his leadership of the Compton Gamma Ray Observatory and the SWIFT Mission. His contributions have significantly increased our understanding of gamma-ray phenomena, unveiling the long-sought origin of short gamma-ray bursts.

It is for these reasons, and many more, that Dr. Gehrels is a well-deserving recipient of the 2012 COSPAR Massey Award.

- <u>COSPAR Distinguished Service Medal</u>:

Peter Willmore (United Kingdom)

Professor Peter Willmore was the driving force behind COSPAR Capacity Building activities. It is due to his perseverance and leadership that the Bureau's decision to engage in these activities became a reality. He was involved in organizing the first workshop in 2001 and actively engaged in the organization of almost all workshops through the eleventh in early 2010. He has continued to contribute to workshops in his field as a lecturer, including the one held in Argentina in summer 2011. Perhaps more importantly, Professor Willmore was instrumental in defining the purpose and shaping the structure of the capacity building program, expanding the scope of the workshops from astrophysics to Earth observations and planetary science, developing post-workshop evaluation practices, and in general making this a known and respected series of training activities to a large number of outside organizations, many of which continue to sponsor regularly workshops in their field.

Furthermore, Professor Willmore is at the origin of the follow-on Fellowship Program which is now a well-established option for a growing number of graduates of the workshops and in which an ever expanding number of institutes participates by hosting students. He also served two terms as founding Chair of the COSPAR Panel on Capacity Building (PCB) which he helped create further to the success of the first workshops.

In addition to his immeasurable input to capacity building activities, Professor Willmore has contributed in many ways to COSPAR activities for as long as the Committee has existed. While I do not know the details of every activity he has engaged in on COSPAR's behalf, he was present at the first COSPAR space science symposium in 1960 and certainly had many opportunities in the intervening period to promote our Committee in the UK and farther afield. For instance, he continues to serve as National Representative and was a Bureau member (1994 - 2002), Bureau observer for capacity building affairs (2002 - 2010), Chair of the Nominations Committee (2010 - 2014), not to mention member of the Publications Committee, member of many Assembly Resolutions and Recommendations Committees, the 50th Anniversary Committee, and the now disbanded Meetings Committee. Professor Willmore also led the group which re-evaluated the COSPAR national contribution scheme in the late 1990s, an exhaustive two year review which resulted in much detailed analysis and no doubt contributed to a certain degree to the current satisfactory state of COSPAR finances.

While there are certainly many other contributions I have overlooked, let me just conclude by mentioning that Professor Willmore organized the very memorable 1996 Scientific Assembly in Birmingham and that it was he who in 2005 or 2006 came to this campus and made the initial recommendation for Mysore as the site of a future Assembly to be held in India.

By any measure Professor Willmore is a most deserving recipient of the COSPAR Distinguished Service Medal, and it is my particular pleasure to bestow this honor on him here at this Assembly.

- COSPAR/ISRO Vikram Sarabhai Medal:

Rafael Navarro-Gonzalez (Mexico)

Professor Rafael Navarro-Gonzalez is a very distinguished scientist in geological sciences and astrobiology. He has made several outstanding contributions in the fields of soil chemistry on Mars, origin and evolution of life on Earth and Mars, role of aerosols in the Titan atmosphere and physico-chemical properties of thunderstorms and lightning and their impact on the origin and evolution of life. His investigation of Mars clearly points to the presence of organic material in the Martian soil at PPM level. Professor Gonzalez's voluminous research encompasses laboratory simulations, field work and theoretical modelling cutting across chemistry, physics and biology. In recognition of significant contributions made, Professor Gonzalez has been selected as a member of the science team by NASA for the astrobiology experiment on the Mars Rover during the forthcoming Mars Mission. Professor Gonzalez has published well over 100 well-cited papers. COSPAR and the Indian Space Research Organisation are truly honoured to award the Vikram Sarabhai Medal 2012 to Professor Navarro-Gonzalez of Mexico for his outstanding research contributions in astrobiology.

- COSPAR/CAS Jeoujang Jaw Award:

Robert P. Lin (USA)

Professor Lin is a world-renowned experimentalist and space scientist; his primary interest is in how particles are accelerated to high energies in nature, from the sun and in the interplanetary medium.

Professor Lin led the pioneering RHESSI (Ramaty High Energy Solar Spectroscopic Imager) mission that made the high resolution imaging and spectroscopy of the x-rays and gamma-rays emitted by energetic particles accelerated by solar flares. The accomplishments of this mission include the first hard X-ray imaging spectroscopy, the first high-resolution spectroscopy of solar gamma-ray lines, the first imaging above 100 keV, and the first imaging of solar gamma-ray lines. The mission is still returning excellent data after almost ten years in orbit and has detected more than 30,000 solar flares referenced in more than 800 refereed publications.

In addition to RHESSI, Professor Lin has also led the development of various innovative energetic particle and plasma instruments that have been flown on space missions and have provided in situ measurements of plasma and fields in the Earth's magnetosphere and upstream. These instruments have also gathered valuable information on the origin and dynamics of the solar wind and the interaction of the Earth's magnetosphere with the solar wind. Furthermore, Professor Lin has developed instruments for mapping the surface magnetic fields of Mars and the Moon by means of electron reflection magnetometry.

The accomplishments above, and many more, make Professor Lin a most worthy recipient of the Jeoujang Jaw Award which recognizes distinguished pioneering contributions to promoting space research, establishing new space science research branches and founding new exploration programs.

COSPAR TODAY

The Committee on Space Research (COSPAR) has both National Scientific Institutions and International Scientific Unions as members. Forty-six National Scientific Institutions engaged in space research and thirteen International Scientific Unions adhering to the International Council for Science (ICSU) belong to COSPAR. Moreover, approximately 8000 scientists actively engaged in space research are COSPAR Associates. Companies and organizations interested in supporting COSPAR activities may also become Associated Supporters of the Committee.

COSPAR acts mainly as an entity which:

• is responsible for organizing biennial Scientific Assemblies with strong contributions from most countries engaged in space research. These meetings allow the presentation of the latest scientific results, the exchange of knowledge and also the discussion of space research problems. Over several decades providing this service has brought recognition to the COSPAR Scientific Assembly as the premier forum for presenting the most important results in space research in all disciplines and as the focal point for truly international space science. In this regard it should be observed that COSPAR has played a central role in the development of new space disciplines such as life sciences or fundamental physics, by facilitating the interaction between scientists in emergent space fields and senior space researchers,

• provides the means for rapid publication of results in its journal Advances in Space Research,

• strives to promote the use of space science for the benefit of mankind and for its adoption by developing countries and new space-faring nations, in particular through a series of Capacity Building Workshops which teach very practical skills enabling researchers to participate in international space research programs,

• organizes, on a regional scale, scientific exchange and public outreach on specific research topics, in the framework of Colloquia and Symposia,

• advises, as required, the UN and other intergovernmental organizations on space research matters or on the assessment of scientific issues in which space can play a role, for example the

Group on Earth Observations (GEO), in which COSPAR is a Participating Organization and co-chair of its Scientific and Technology Committee,

• prepares scientific and technical standards related to space research,

• promotes, on an international level, research in space, much of which has grown into large international collaborative programs in the mainstream of scientific research.

COSPAR's objectives are to promote on an international level scientific research in space, with emphasis on the exchange of results, information and opinions, and to provide a forum, open to all scientists, for the discussion of problems that may affect scientific space research. These objectives are achieved through the organization of Scientific Assemblies, publications and other means.

ICSU established COSPAR during an international meeting in London in 1958. COSPAR's first Space Science Symposium was organized in Nice in January 1960. COSPAR is an interdisciplinary entity that ignores political considerations and views all questions solely from the scientific standpoint.

A complete list of previous award recipients may be found at:

http://cosparhq.cnes.fr/Awards/awards.htm

Further information on COSPAR is available at:

http://cosparhq.cnes.fr

or from the Secretariat:

<u>cospar@cosparhq.cnes.fr</u> Tel: +33 1 44 76 75 10





This pdf circulated in Volume 4, Number 71, on 23 June 2012.

Second Circular

7th IAGA/ICMA/CAWSES Workshop on Long-Term Changes and Trends in the Atmosphere

11-14 September, 2012 Buenos Aires, Argentina

www1.herrera.unt.edu.ar/faceyt/trends2012/













Second Circular

7th IAGA/ICMA/CAWSES Workshop on Long-Term Changes and Trends in the Atmosphere

11-14 September, 2012 Buenos Aires, Argentina (www1.herrera.unt.edu.ar/faceyt/trends2012/)

The 7th IAGA/ICMA/CAWSES International Workshop on "Long-Term Changes and Trends in the Atmosphere" will be held in Buenos Aires, Argentina, during September 11-14, 2012. Buenos Aires is the capital of Argentina located in South America, on the shore of the Rio de la Plata. Organizing Committees of the workshop cordially invites you to participate and submit your research work. This workshop is 7th in a series of workshops organized by the IAGA Working Group II.F on TRENDS in association with ICMA (IAMAS) and CAWSES.

• Host City

This workshop is organized in the beautiful city of Buenos Aires; a cosmopolitan city and a top tourist destination, known for its European style architecture and rich cultural life. The city, with 3 million habitants, has 48 neighborhoods. In each one there are bars, squares, football and other sports fields, temples, "milongas" and theatres, but the most visited zones are Puerto Madero, San Telmo, Recoleta, Palermo, La Boca, and the downtown avenues. Buenos Aires is one of the main cultural poles of the continent. It is recognized by the variety and quality of cultural events, museums and exciting exhibitions and collections. Tango, music and dance, can be met at the most sophisticated "tanguerias" or the popular "milongas". With plenty of restaurants, eating in Buenos Aires is a question of choosing where and what, from the typical "asado" to foods of the several communities that settled in the city during centuries of immigration. Another feature that attracts locals and visitors alike is shopping, with exhibitions, open-air commercial circuits and shopping malls. The transport system in Buenos Aires has multiple options: subways (subtes), buses, train, and taxis. You can also ride alone and on foot or with expert guides on stories and details; you can dedicate months to Buenos Aires or learn the essentials in a few days, even experience Buenos Aires in just 24 hours; you can leave with the desire to return again.

• Important Dates

(The previous deadline of June 25 has been postponed to June 30 for Abstract Submission only)

Deadline for Abstract Submission:	June 30, 2012
Deadline for Financial Support Application:	June 25, 2012
Decision about Financial Support:	July 10, 2012
Communication of Abstract Acceptance:	July 10, 2012

• Workshop Website

www1.herrera.unt.edu.ar/faceyt/trends2012/

• Host Institute

University of CEMA, UCEMA (CEMA: Centro de Estudios Macroeconómicos de Argentina – Center of Macroeconomic Studies of Argentina) Reconquista 775, C1054AAP, Ciudad de Buenos Aires, Argentina <u>http://www.ucema.edu.ar/</u>

• Venue

The workshop will be held at the University of CEMA (UCEMA, www.ucema.edu.ar), Buenos Aires, Argentina, during September 11-14, 2012. The UCEMA is located in the downtown of the city: Reconquista 775, close to the intersection of Cordoba and Leandro Alem avenues. Its location, right in the heart of the city, allows quick and direct access from every point of Buenos Aires city.





• Organizers

Scientific Organizing Committee

Gufran Beig, *India* (beig@tropmet.res.in) -Chairman Jan Lastovicka, *Czech Republic* (jla@ufa.cas.cz) Dan Marsh, *USA* (marsh@ucar.edu) John Emmert, *USA* (john.emmert@nrl.navy.mil) Christoph Jacobi, *Germany* (jacobi@rz.uni-leipzig.de) Liying Qian, *USA* (lqian@ucar.edu) Ana G. Elias, *Argentina* (aelias@herrera.unt.edu.ar) -Convener

Local Organizing Committee (LOC)

Ana G. Elias, CONICET, FACEyT-UNT, *Argentina* (aelias@herrera.unt.edu.ar) Marta Zossi, CONICET, FACEyT-UNT, *Argentina* (mzossi@herrera.unt.edu.ar) Teresita Heredia, FACEyT-UNT, *Argentina* (theredia@herrera.unt.edu.ar) Patricia M. Fernandez, FACEyT-UNT, *Argentina* (pfernandez@herrera.unt.edu.ar)

Local Contact

Dr. Ana G. Elias Universidad Nacional de Tucuman Facultad de Ciencias Exactas y Tecnologia Departamento de Fisica 4000 Tucuman - Argentina E-mail: aelias@herrera.unt.edu.ar OR anagelias@yahoo.com Phone: +54 381 4364093 Ext. 7828

• Workshop Focus

Long-term changes in Earth's atmosphere are becoming more and more relevant to the future of our world and it is paramount that we quantify and understand changes occurring at all levels within the coupled atmospheric system. The increasing concentration of greenhouse gases, stratospheric ozone depletion, varying solar and geomagnetic activity, secular change of Earth's magnetic field, and changing dynamics propagating up from the troposphere are some of the possible causes of long-term changes in the stratosphere, mesosphere, thermosphere and ionosphere. The goals of this workshop are to review the current state of knowledge about trends in these atmospheric regions, and to discuss what research is necessary for resolving inconsistencies, reducing uncertainties, and achieving a deeper understanding of middle and upper atmospheric climate change - especially the relative influences of anthropogenic and solar effects.

• Call for Abstract

Abstracts are invited under the following themes of the conference. Both oral & poster presentations are welcome. The abstract submission is now open & will close on June 30, 2012. Organizing committee welcome scientists from all around the world, to submit an abstract related to one of the conference themes listed below.

- 1. New insight from satellite data (e.g., TIMED, OMI, etc.) and international collaborations (e.g., NDMC, CAWSES Activities, etc.)
- 2. New statistical approaches in trend detection: nonlinearities, discontinuities, and uncertainties
- 3. Gravity waves and changing climate
- 4. Influence of tropospheric and stratospheric trends on upper atmospheric climate
- 5. Drivers of trends and trends in middle and upper atmospheric dynamical parameters
- 6. Emerging trends in the mesosphere, including NLC/PMCs
- 7. Attribution of trends in the thermosphere and ionosphere (including trends in irregularities and turbulence) to anthropogenic forcing, geomagnetism, and solar climate
- 8. Whole-atmosphere climate change: Impacts, adaptation, mitigation, and geo-engineering

We also welcome papers using all types of observational techniques to determine the long-term changes and trends that have occurred in the past and also to determine the processes behind those changes. We also welcome contributions which consider the availability, quality and acquisition of various data sets which may be exploited for trend studies, and statistical methods for deriving and validating those trends. Interpretation and attribution of observational results depends heavily on theoretical models and numerical simulations of the trends, and presentations dealing with these topics are particularly welcome. While the troposphere is not the main focus of the workshop, it is clear that it has a major role to play in middle and upper atmosphere trends; papers that demonstrate this relevance are also welcome.

* Submission Information

Abstract submission should be made by e-mail to any of the following e-mails: aelias@herrera.unt.edu.ar or anagelias@yahoo.com While sending the abstract e-mail, write "TREND 2012 Abstract" in the Subject

Acceptance Intimation will be made by July 10, 2012.

✤ Abstract Format

The requested abstract file format is a Word document (.doc). Times New Roman and 12 letter size, and left-justification are recommended.

The abstracts should be prepared in the following format: *ABSTRACT TITLE IN CAPITAL LETTERS, left justified and leave a blank line after this.

*Name(s) of Author(s): Left justified, the First Name and the Last (Family) Name of the Author WHO WILL PRESENT THE PAPER should be in capital letters.

*Affiliation(s) of the Author(s). In case of multiple affiliations, the number that corresponds to the proper affiliation should be shown after each name. Leave a blank line after the last affiliation.

*Text of Abstract: Left justified, do not indent paragraphs, single line spacing, Below the abstract leave a blank line.

*Please provide the following information (in the same abstract Word file, after the abstract text):

- 1. Keywords (1–3)
- 2. Name, address and e-mail of the corresponding author
- 3. Type of presentation preferred (oral or poster)
- 4. Are you applying for a financial support? YES or NO

Registration Information

All participants should register by filling in the personal details of the Registration Form, available at workshop website: http://www1.herrera.unt.edu.ar/faceyt/trends2012/ E-mail the filled Registration Form to: aelias@herrera.unt.edu.ar or anagelias@yahoo.com The registration process is finished once you receive a confirmation mail.

• **Registration Fee:**

Category	Registration Fee		
Regular participant	170 U\$S		
Young Scientist	120 U\$S		
Students	120 U\$S		
Accompanying Person	100 U\$S		

- The registration fee must be paid at the Workshop. It can be paid in US dollars (U\$S) or the equivalent in Argentine pesos (\$). Approximately 1 U\$S = 4.50 \$, but it can fluctuate.
- Registration fee for workshop participants (regular and young scientist/student) include: participation in all sessions, conference folder with printed Programme Book including Abstracts, welcome dinner with tango show on Tuesday night, and a city tour on Thursday afternoon.
- Category of young scientists and students has an age limit: 35 years (Age varification should be certified by supervisor)

• Financial Support

We strongly encourage the applicant to secure the financial support from national /institutional resources. However, partial travel grants will be provided to support participation of students, early career scientists, scientists from developing countries or scientists from a country whose economy is in transition. These scientists must submit the abstract as lead author. All grant requests should be accompanied by a short Curriculum Vitae (max 2 page) indicating the scientific motivation and expected benefits. Successful applicants will be notified on the result of the selection process by early July 2012. Request for grant should be send to the Local Organizing Committee by e-mail to:

<u>aelias@herrera.unt.edu.ar</u> or <u>anagelias@yahoo.com</u>, with the subject: "Trend 2012, application for grant".

• Social Events

Tuesday, September 11, 2012 (Evening): Welcome reception dinner with Tango show, included in the Registration Fee.

The dinner and the tango show will take place at "El Viejo Almacen", located in the neighborhood of San Telmo, at the corner of Balcarce and Independencia, renowned as the home of the most traditional tango house and that has preserved the true identity of tango over the years.

Dinner will be served between 8:00 and 10:00 PM at the restaurant. Then, at 10:00 PM, just crossing the street we will move to the Tangueria to watch the Tango Show until 23:30 PM. If you want more details about El Viejo Almacen you can check its website: http://www.viejo-almacen.com.ar/ing/index.html

Transportation to and from El Viejo Almacen has been arranged by the LOC. We will give you more details at the Workshop.

Thursday, September 13, 2012 (Afternoon): Site seeing tour to Buenos Aires by Bus, included in the Registration Fee. Duration: 3 hours.

 Detailed information on guided tours and accompanying persons programs will be available at the Information desk at the Workshop.
For planned tours you can also check with the travel agency Voyporelmundo (www.voyporelmundo.com). This agency is located three blocks away (300 meters) from the UCEMA (marked in green in the Hotel map, page 9 of this Circular).

	11 / 09 Tuesday	12 / 09 Wednesday	13 / 09 Thursday	14 / 09 Friday		
9:30 - 11:00	Opening of the Workshop & Welcome words & Session 1	Session 5	Session 9	Session 11		
11:00 - 11:30	Coffee Break					
11:30 - 13:00	Session 2	Session 6	Session 10	Session 12 &		
13:00 - 14:30	Lunch			Announcement of 8th Trend Workshop & Closing Ceremony		
14:30 - 16:00	Session 3 & Poster Session	Session 7 & Poster Session				
16:00 - 16:30	Coffee Break		City Tour			
16:30 - 18:00	Session 4	Session 8 & Working Groups Discussions				

• Preliminary Scientific Program

20:00 -
23:30Welcome Dinner
& Tango Show at
El Viejo Almacén

• Previous Workshops on TRENDS

- ✤ 1999, Pune, India
- ✤ 2001, Prague, Czech Republic
- ✤ 2004, Sozopol, Bulgaria
- 2006, Sodankyla, Finland
- ✤ 2008, Saint Petersburg, Russia
- 2010, Boulder, Colorado, USA

• Useful Information

Lunch during the Workshop

Lunch will be served at the Cafeteria of the UCEMA between 13:00 and 14:30, and will cost around 65.00 Argentine \$, that is 14.50 U\$S. It includes starter, main course and dessert (it is very likely that it will include beverage and coffee too).

* Transportation from the Airport

From the International Airport in Buenos Aires, Ezeiza, to the downtown, you can go by car or by bus. Official transport services are Manuel Tienda Leon and Aerobus Ezeiza which cost 10 U\$S-15 U\$S by bus, and around 55 U\$S by car. For more information please check the following websites: http://www.tiendaleon.com.ar/home/home.asp, http://www.aerobusezeiza.com.ar/ing/, http://www.aa2000.com.ar/buses.aspx

Among the urban buses, lines 86 and 8 (around 1.00 U\$S) leaves you close to the downtown. The travel agency Voyporelmundo will also offer this kind of transportation. More information will be available soon at the Workshop website.

Weather

The climate of Buenos Aires is mild all year round. The mean annual temperature is 18° C (~64° F), making extremely hot and cold days very infrequent. Thus, visitors can enjoy walking around the city in any season.

The week of the Workshop is the second last week of winter, so it is very close to the beginning of spring in the Southern Hemisphere (September 21). We can have then characteristics of both seasons. In winter, cold is moderate during the day, but temperature considerably drops at night. During spring, rains are more frequent, but they are mild or last a short time. Days are sunny, mornings are slightly cold; the temperature rises at midday and drops again at night. For September the average high temperature is $19^{\circ}C$ ($66^{\circ}F$), and the average low: $10^{\circ}C$ ($50^{\circ}F$).

* Visa requirements

The following site is a link to Visa Requirements of Argentina: http://www.migraciones.gov.ar/accesibleingles/?visas

However, we strongly suggest to check at your consulate country about the documentation needed to enter Argentina.

In the site link you should check the first column (Regular Passaport – Tourist) ("No Requiere Visa" = Do not need Visa; "Requiere Visa" = Need Visa)

If you need an Invitation Letter, please contact Ana G. Elias (<u>aelias@herrera.unt.edu.ar</u> or <u>anagelias@yahoo.com</u>)

Countries of the European Union, for example, do not need visa to enter Argentina. Some of the countries which need visa are: Burkina Faso, China, Egypt, Filipines, India, Indonesia, Nigeria.

✤ Units of measure and electricity

Argentina uses the metric system for measurements and Celsius for temperatures. The electric power supply is 220 V/ 50 Hz. If your device doesn't accept 220 V and 50 Hz you will need to use a voltage converter.

Other

The UCEMA is very close (2 block \approx 200 meters) to "Galerias Pacifico", one of the most elegant shopping malls in Argentina. It was declared National Historic Monument due to the undeniable artistic value of its architecture and its striking murals. It is situated in the corner of Florida street and Cordoba avenue and it possesses over 150 stores and a food court with many different culinary proposals.

• Hotels

The area of the UCEMA, is full of hotels of all categories.

Following is a list of a few hotels which are close to the UCEMA, where the Workshop will take place, with their address and special prices for Workshop participants.

In order to get these prices you should mention that you are a participant of the Workshop. In the case of Esplendor Buenos Aires and Dazzler Hotels, please send a mail to corporativo@fenhoteles.com for room reservation.

The official website of each hotel appears in the Workshop website.

Note that all prices are for double occupancy, breakfast and taxes included.

Hotel	Address	Distance from UCEMA	Price for double or single occupancy (breakfast & taxes included)
Esplendor Buenos Aires	San Martín 780	1 block (\approx 100 meters)	121.00 U\$S
Dazzler Tower San Martín	San Martín 920	2 blocks (≈ 200 meters)	115.00 U\$S
Dazzler Tower Maipú	Maipú 856	3 and a half blocks (\approx 350 meters)	105.00 U\$S
Dazzler Libertad	Libertad 902	9 blocks (≈ 900 meters)	87.00 U\$S 97.00 U\$S
Hotel Vista Sol Buenos Aires	Tucumán, 451	2 blocks(≈ 200 meters)	127.00 U\$S
Holiday Inn Express: Puerto Madero	Avenida Leandro Alem 770	1 and a half blocks (≈ 150 meters)	180.00 U\$S

We suggest also two other hotels very close to the UCEMA which are:

* NH Lancaster, Av. Cordoba 405, 170 U\$S (breakfast and taxes included) (blue dot in the map) * Sheraton Libertador, Av. Cordoba 690, 210 U\$S (without breakfast but with taxes included; for breakfast add 20 U\$S) (blue dots in the map)



Map showing the hotels, together with the Workshop place (UCEMA, Reconquista 775).

• Tours offered by Voyporelmundo (Lloyd Transatlántico SRL) travel agency (www.voyporelmundo.com)

REGULAR EXCURSIONS

CLASSIC CITY TOUR 25 U\$S

Daily / at: 9:00, 10:15 and 14:00. Duration: 3 hours

We invite you to discover Buenos Aires, beginning at the downtown with the main attractions, 9 de Julio Avenue, the Colon theatre, the Obelisk. We follow to Plaza de Mayo, and then toward the south of the city through San Telmo, its Tanguerias, La Boca neighborhood and Caminito. We continue through Puerto Madero, Palermo and La Recoleta. On Sundays we end at San Telmo to visit the flea market.

VISIT TO DELTA OF TIGRE & COAST LINE TRAIN 36 U\$S Daily / at: 9:00 and 13:30. Duration: 5 hours

This tour covers the coastal area of the city, beginning at Libertador Avenue, Costanera, Jorge Newberry Airport, and River Plate Football stadium. We pass the Presidential Residence in Olivos, Maipu Train Station, where we will take the train to San Isidro Station and you will be able to explore its attractions. We will continue to the Tigre, where we will navigate. On Sundays we end at San Telmo to visit the flea market.

GAUCHO TOUR AT ESTANCIA SANTA SUSANA 95 U\$S

Departures on Wednesday, Friday, Saturday and Sunday / at: 9:30. Duration: 8 hours This tour brings you to the "Estancia Santa Susana", where you will have the opportunity to experience the life of the Gaucho Argentino, and eat an authentic "asado criollo". Food and beverage included.

PRE AND POST EVENT TOURS

IGUAZU FALLS 3 Days – 2 Nights / 4* Hotels from 751 U\$S

Experience one of the most magnificent natural wonders of the world, immerse yourself in a paradise of rivers, jungle and red earth. The price includes:

- * Air tickets: Buenos Aires-Puerto Iguazú-Buenos Aires
- * Transportation to hotel
- * 2 nights at Hotel Saint George or similar.
- * Excursions: Argentine and Brazilian falls

It does not include tickets to the National Parks.

Price per person, for double occupancy hotel room. Valid between September 8 and 16, 2012.

PERITO MORENO GLACIER 3 Days - 2 Nights / 4* Hotels from 940 U\$S

This Price includes:

- * Airtickets: Buenos Aires-El Calafate Buenos Aires
- * Transportation to hotel
- * 2 nights at Hotel Altos de Calafate or similar.
- * Excursions: Gateways Perito Moreno glacier and Nautical Safari.

Price per person, for double occupancy hotel room. Valid between September 8 and 16, 2012.

More Tours can be checked with the travel agency and at the official website of Buenos Aires City.

• Sponsors



International Association of Geomagnetism and Aeronomy



International Commission on the Middle Atmosphere



Climate and Weather in the Sun–Earth System



Scientific Committee for Solar–Terrestrial Physics



UCEMA Universidad del Centro de Estudios Macroeconómicos de Argentina



Facultad de Ciencias Exactas y Tecnología

CONICET



Consejo Nacional de Investigaciones Científicas y Técnicas



International Centre for Theoretical Physics



UNT Universidad Nacional de Tucumán

AGENCIA



Agencia Nacional de Promocion Cientifica y Tecnologica de Argentina