

International Astrostatistics Association

IAA Newsletter – February 2016

15 February, 2016

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Dear members of the IAA,

My apologies for the delay in getting the February Newsletter out. I do have two rather major items to share with you – items which I alluded to in past Newsletters. One of the items has been authored by Rafael de Souza, IAA Vice President for Development, the second item is by Tanuka Chattopadhyay, Chair of the new IAA awards committee. Rather than I paraphrasing their communications, I asked them write a section for this Newsletter.

IAA Partnership with Overleaf, Limited

As you are all aware, one of the goals for the next 2 years is to increase the visibility of the IAA. In the development committee, among other strategies, we are seeking partnerships with companies which enable and/or facilitate the development of collaborative science.

In this context, I am happy to announce that the first of such partnerships have been established. Through the Cosmostatistics Initiative (COIN - <u>https://goo.gl/8cmrmI</u>), one of the IAA sections, we established a mutually beneficial contract with Overleaf, a collaborative latex platform - <u>https://goo.gl/SAqv55</u>.

Based on this agreement Overleaf will grant: Overleaf Pro accounts for COIN members and **active IAA members for 1 year**

Comparison of Overleaf's regular account plans: free accounts : 1GB of space storage, max 60 files/project, projects are public pro accounts (US\$ 96/year): 10 GB of space storage, max 500 files/project, projects are private, priority support and quick save to Dropbox

A Branded page for registration in Overleaf A dedicated virtual space for storage of IAA/COIN latex templates Both parties agree in boosting each other visibility through their websites and other possible media. After the end of the first year 10 award extensions of these pro-accounts will be granted to those who have used the software for collaborative manuscript preparation, and who may have helped in advertising the value of engaging in web-based manuscript collaboration. Acknowledging the use of Overleaf in collaborative research and manuscript development is preferred, but not mandatory of course.

Be sure to check the interview with one of the COIN and IAA members, Maria L. Dantas, with Overleaf<u>https://goo.gl/FiUCdU</u>

I will come back to you with more information as to when the registration page has been prepared.

This is the first of a series of strategies we are considering within the Development committee in order to boost the visibility of our association, and to provide services for our membership.

I Hope you can all benefit from it.

Sincerely,

Rafael S. de Souza, Vice-president for Development

IAA Awards

I am happy to announce that IAA has formed IAA Award Committee with the following members. Our appointment is for a two year period ending 31 December, 2017.

Chair: Tanuka Chattopadhyay , Calcutta University, India <u>tanuka@iucaa.ernet.in/tanuka2008@gmail.com</u>					
Members:					
David Hand	Imperial College, London, UK	d.j.hand@imperial.ac.uk			
Thomas Kitching	Univ of Edinburgh, UK	t.kitching@ucl.ac.uk			
Oleg Malkov	Moscow State Univ, Russia	<u>malkov@inasan.ru</u>			
Bruce Bassett	Univ of Cape Town, South Africa	bruce.a.bassett@gmail.com			
Didler Fraix-Burnet	Astrophysics lab of Grenoble, France				
	didier.fraix-burnet@obs.ujf-grenoble.fr				

I have the following suggestions for various awards:

- 10 Fellow Awards (for the first two years and may be reduced to 5 in the subsequent years.
- 2 Awards for outstanding contributions in Astrostatistics
- 1-3 Awards for outstanding publications in Astrostatistics in 2015, or during the past 5 years.
- 1-3 Awards for outstanding publication in Astrostatistics by Post Docs in 2015, or during the past 5 years.
- 1-3 Awards for outstanding publication in Astrostatistics by students in 2015, or during the past 5 years.

Also our President has proposed a special IAA Lecture Award each year, starting next year. The Award Winner would be invited to give a lecture on a topic related to astrostatistics or astroinformatics at one of the major statistics or astronomical conventions i.e., at the

Joint Statistics Meetings of the American Statistical Association, or at the Bi-annual ISI World Statistics Congress, or at the American Astronomical Society, or at the IAU General Assembly

Of course such a lecture must be approved by us, as well as by the organization or association conducting the convention. Winners of the outstanding contribution awards might be considered for presenting lectures.

I invite nominations for the above awards from IAA members. Please submit nominations to me by March 15, 2016. A brief statement regarding your nominee and why you are nominating him or her will be appreciated. You may make more than one nomination.

Regards Tanuka Chattopadhyay Professor Department of Applied Mathematics University of Calcutta 92 A.P.C Road, Kolkata 700009 INDIA email:tanuka2008@gmail.com

MEMBERSHIP

Stefano Andreon, IAA Membership Chair, is developing software so that those wishing to gain IAA membership can do so via an on-line registration form. Changes to one's email address, and other personal profile data may also be amended on line. That's the goal. We'll advise you all when changes are made to the current method of registration.

2016-2017 IAA COUNCIL

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OFFICERS

President	Joseph M. Hilbe
V-President - statistics	Jogesh Babu
V-President - astronomy	Jean-luc Starck
V-President - astroinformatics	Kirk Borne
V-President - development	Rafael S. de Souza
V-President - at large	Bruce Bassett

CURRENT IAA SECTIONS

Cosmostatistics Initiative (COIN):Rafael S de SouzaPlanetary Science:Jamie Riggs < jamie.riggs@northwestern.edu>

IAA COMMITTEES

Development Membership Awards Public Relations Nominations Rafael de Souza Stefano Andreon Tanuka Chattopadhyay Emille Ishida rafael.2706@gmail.com stefano.andreon@brera.inaf.it tanuka2008@gmail.com emilleishida@gmail.com

PROPOSED SECTIONS

Exoplanets

Solar Physics

Galactic evolution

Stellar Evolution

Astrobiology

Instrumentation and Observation Methodology

Radio astronomy Optical including infrared and ultraviolet X-ray astronomy Gamma ray astronomy

Please contact me if you are interested in heading any of the above sections, or others you may suggest, or who are interested in participating in a section. I am going to be focusing my energies this term in securing funding to support our sections, but I can't very well make a proposal to a funding agency. or to a corporate partner about supporting a section on exoplanets, for example, if there is no such section. Rafael de Souza has also accepted the task as VP for development, and will be working with me and a development committee to secure funding and partnerships.

Standing committees such as the ones we have already are vital to the operation of any viable professional or academic scientific association. I urge you to participate in joining a committee. Since we are a global association, committees are not going to be meeting at a physical location. Rather they can periodically meet by *Skype*, *Facetime*, or *Hangout*. We can also set up private blog-type meeting sites through ASAIP or another through some alternative site. It is very important to our long term success for us to have viable committees such as I have listed.

Best, Joseph Hilbe

ANNOUNCEMENT

Statistical Challenges in Modern Astronomy VI Carnegie Mellon University, June 6 to 10, 2016.

Second Announcement, and Call for Papers

Visit <u>scma6.org</u> for more information.

After five groundbreaking conferences at Penn State, Statistical Challenges in Modern Astronomy VI will be held at Carnegie Mellon University, June 6 to 10, 2016.

This meeting will continue the interdisciplinary tradition of its predecessors, bringing together researchers in astronomy, cosmology, statistics, and machine learning to address broad inference and discovery challenges, highlighting topics such as exoplanets, gravitational lensing, variable sources, Milky Way structure and evolution, among others.

Thanks to funding from the LSST Corporation, a featured "LSST at SCMA Day" will highlight some of the urgent statistical issues facing the Large Synoptic Survey Telescope. Keynote speakers will be Zeljko Ivezic (Univ. of Washington) and Robert Tibshirani (Stanford)

We welcome submissions of contributed talks or posters. Submit an abstract by February 1 for full consideration. Travel grants are available for early career researchers. Apply online by March 1.

See <u>scma6.org</u> for more details and for the latest information.

On behalf of the Scientific Organizing Committee, Shirley Ho and Chad Schafer, cschafer@stat.cmu.edu, co-chairs



COSMO21 24-27 May, 2016 : Chania, Crete (Greece) http://cosmo21.cosmostat.org/

The emphasis of the conference is on advances and methodological challenges in cosmology, and new results derived from advanced data analysis and modeling methods. Cosmology is entering a new area which will require processing of huge data sets, and measurements at the sub-percent level of accuracy in order to answer fundamental cosmological questions such as the nature of dark matter, dark energy and gravity. As ever, statistics will inevitably play a fundamental role in understanding the new generation of data, but with additional challenges of ever-increasing datasets and large parameter spaces.

Topics

- Cosmic microwave background: non-Gaussianity, component separation methods.
- Weak lensing: galaxy shape measurements, projected mass density map reconstruction, three-dimensional mapping of the dark matter, high order statistics, Euclid, LSST. □ Large-scale structure □ High redshift supernovae.
- Mapping high-z 21-cm radiation
- Lyman-alpha forest
- Astronomical discovery from overwhelmingly large datasets: BOSS, EUCLID, PAU, LAMOST, LOFAR, SKA, LSST and others.
- Statistical methods used in astronomical data analysis (including new developments coming from fertile cross-interactions in astrostatistics). A preliminary list of these methods is included below:

There will be several sessions during the conference. Each session will have at least one keynote speaker, and half of the talks will be contributed talks. The cross-disciplinary nature of the symposium is reflected in the inclusion of speakers from the statistics community in the suggested list. Conference Registration and Abstract submission opens: 1 January, 2016

Chairs, Scientific Organizing Committee

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