## (IAA)

# International Astrostatistics Association IAA Newsletter – July 2014

## **Announcing**

#### **AstroInformatics 2014**

AstroInformatics 2014, the fifth in the series of annual international conferences on the subject, will be held in Viña del Mar, Chile, on August 25-29, 2014. The conference website is <a href="http://eventos.cmm.uchile.cl/astro2014/">http://eventos.cmm.uchile.cl/astro2014/</a>, and it provides the additional information. To contact the organizers, please email to <a href="astro2014@dim.uchile.cl">astro2014@dim.uchile.cl</a>

Eduardo Vera, George Djorgovski, and Guiseppe Longo, conference Co-Chairs

#### IAA member, Chris Impey, appointed an HHMI Professor

**Christopher Imprey**, distinguished professor of Astronomy at the University of Arizona and deputy head of the department was recently appointed a *Howard Hughes Medical Institute Professor*. Only 55 scientists have been awarded this position since its inception, and Prof. Imprey is the first astronomer. The appointment comes with a five-year grant of \$1 million to support his research and educational activities. Our congratulations to Chris.

# Astrostatistics Presentations at the Joint Statistical Meetings of the American Statistical Association 3-7 Aug, 2014, Boston, MA

3 Aug (Su) 4:00 - 5:50pm: Bayesian Astrostatistics #47

6 Aug (We) 8:30-10:20am: Big Data in Astrostatistics #433

2:00 - 3:50pm: Statistical Analysis of Kepler Data at SAMSI #539

7 Aug (Th) 8:30 -10:20am: Introductory Overview Lecture: Astrostatistics #577

# American Statistical Association Interest Group in Astrostatistics, Informal Initial Meeting

6 Aug (Wed) Approx 10:30am, following "Big Data in Astrostatistics". Meet in front of the session room. See above session list.

Contact **Jessi Cisewski** for additional information *<cisewski@stat.cmu.edu>*.

#### New statistics book published

I wish to announce a new book of mine that has just been published. It can be used for guidelines on modeling various types of discrete astronomical data situations.

Hilbe, J.M. (2014), Modeling Count Data, Cambridge University Press

The book is being published simultaneously in hardback, paperback and ebook formats. The paperback cost on Amazon is \$34; ebook \$16.50. 298pp

### Request

I am searching for researchers who have an interest in impact science, in particular in the statistical evaluation of impact data. If you have such an interest please contact me at hilbe@asu.edu or j.m.hilbe@gmail.com.

#### Reminders

#### 2014 AstroData Hack Week, Sept 15-19 at the Univ of Washington

Sponsored by the **UW eScience Institute**, with funding from the Alfred P. Sloan Foundation and the Gordon & Betty Moore Foundation.

AstroData Hack Week is a week-long summer school / hack week / unconference focused on astrostatistics and data-intensive astronomy, taking place at the University of Washington

The mornings will be a typical summer school format, with lectures and exercises covering essential skills for working effectively with large astronomical datasets. The afternoons will be entirely unstructured, and offer opportunities for collaborative research, breakout sessions on special topics, and application of the concepts covered during the morning sessions.

The vision is to provide a space to encourage learning, research, collaboration, and sharing of expertise, for the benefit of both young and experienced astronomical researchers alike.

We have space for around 40 attendees, and registration will be open soon! For more information, please see <a href="http://uwescience.github.io/AstroData/">http://uwescience.github.io/AstroData/</a>

The Heilbronn Institute is advertising a fellowship (postdoc) in computational statistics and statistical learning. Both UK and US citizens may be suitable.

The link is:

http://www.bristol.ac.uk/jobs/find/details.html?nPostingID=1722&nPostingTargetlD=5833

# IAA Working Group in Cosmostatistics Project Groups Forming

Led by **Rafael de Souza** <rafael.2706@gmail.com > of the Korea Astronomy & Space Science Institute, the *Working Group in Cosmostatistics* is sponsoring various Project Groups, which are formed for the purpose of engaging in the development of software appropriate for cosmological analysis, as well as other more specific research tasks. We currently have 40 members in 5 project groups. Project management is being hosted by the *Astronomer's Workbench* <a href="http://awob.mpg.de">http://awob.mpg.de</a>, a function of the Max Planck Institutes in Germany. We welcome proposals for additional Project Groups, each of which will result in published results. The aim is to actually do serious research utilizing the resources of both astronomers and statisticians. I also welcome proposals for additional Working Groups.

#### **ASAIP - PORTAL**

Be sure to check out the portal if you have not accessed it for awhile. We have been trying to continually update it, and provide new features. You may find something that will be of interest to your research. <a href="https://asaip.psu.edu">https://asaip.psu.edu</a>

#### **ISI World Statistics Congress**

Rio de Janerio, Brazil Jul 27-31 July, 2015

We have made two Special Topic Session in Astrostatistics proposals for the 2015 World Statistics Congress. I should know the results of the proposals for the July Newsletter, and will provide more details at that time.

#### **IAU General Assembly**

Honolulu, Hawaii, USA 3-14 August, 2015

| For IAU mem | bers – don'i | t forget. |      |
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Please send me announcement information for inclusion in future Newsletters.

### **BOOK REVIEW**

Impey, Chris (2013). *Shadow World*, Tuscon, AZ: Dark Skies Press (330 pp) (www.darkskiespress.com) Amazon (paperback: \$13.46; ebook: \$2.99)

In the June Newsletter I promised to give a brief review of a novel that was authored by IAA member Chris Impey (Univ of Arizona) titled *Shadow World*. It's his first novel, following a series of well accepted books on popular astronomy and astrobiology. Impey is a distinguished professor of astronomy at the University of Arizona and former Vice President of the American Astronomical Society. I must admit that I read two of Impey's books before this novel, and found them well written and thoroughly interesting: *How it Ends* (Norton, 2010) and *How it Began* (Norton, 2012).

I have not read a novel for many years, so had some trepidation about actually reading it. I also wasn't sure how well a physical scientist could write fiction, for that's what *Shadow World* is. It's a fictional account detailing the adventures of a former merchant marine Scotsman named Scot McEvoy, from age 19 to 40 as he travels to various destinations throughout the world. How much time he spent on the ocean before commencing his adventure at age 19 is not explained.

In any case, each of the seven destinations constitutes one chapter, and each destination brings McEvoy new friends, new loves, new ideas to discuss, and new ways to evaluate his life. Impey presents each chapter as nearly self contained, with very little to no carry-over from McVoy's earlier adventures. In fact, events and injuries happening to him in one adventure do not appear or effect him in subsequent adventures. The chapters therefore appear to be disconnected, except for the name of the protagonist. I will venture an explanation for this later.

McEvoy begins his journey in the northern Arizona canyon country, some seventy miles west of Flagstaff, AZ, where he meets up with an old Hopi Indian guide named Night Owl. The story relates to their discussions and the hardships of living off the land in the high country.

The second episode takes place in and around Manhattan, which he calls Canyons of Steel. Here he meets with a Mr. Zeeman, who persuades him to go back to school -- McEvoy never completed high school in Scotland. He happens to connect with a girl who is studying for her PhD at Columbia, and new adventures begin.

McElvoy is then in a sense transported to his third episode, which takes place in China. Again, nothing is mentioned of how he arrives in China, or why. His next venture takes place in South America, primarily in Patagonia, which is in the central-southern part of Argentina. Paleontology is discussed at length, which is appropriate when traversing Patagonia. The fifth adventure takes place in Ireland, where the discussion focuses more

on astrobiology than on other areas. This is Impey's area of foremost interest, so the insights provided in the various discussions have a good scientific basis.

The sixth episode takes place in California – in both southern and northern parts of the state. The scene commences in Monrovia, which is some twenty miles east of Pasadena, He meets Pam in the area, where they journey to the top of Mt Wilson (and where in 1929 Hubble discovered that the universe is more than the Milky Way), and otherwise enjoy each other's company. They go to San Francisco, the SETI institute, and surrounding areas for the second part of the chapter.

In the final venture, which is set in Sweden, discussions change to indeterminism (free will), God, life, and other more philosophical topics. We are assumed not to recall, I suppose, that McEvoy had been a 19 year old high school dropout who had just left the merchant marines when the book begins.

The basic theme underlying McEvoy's adventures is his drive to question the events occurring about him. It's as if Impey is writing about a new person in each chapter – and in a way he is. I get the impression that McEvoy is in fact from the future, going back in time to experience entirely different life experiences during the 20<sup>th</sup> century. This explains the discontinuousness of the episodes, why nothing is carried over from or to alternate lives, and other seeming indicators. His actions at times give me the feeling that his mind is simply a software program, albeit a complex one that resembles the Arnold Schwarzenegger movie "Total Recall". Of course, Impey may have had an entirely different vision in his mind when writing the book – but that very nebulousity is what makes the book even more interesting than it is by simply following the discussions.

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