

B3 2023-03-31 Meetings

Attendees:

Stefano Andreon, Didier Fraix-Burnet, Ashish Mahabal, Petr Skoda, Ricardo Vilalta

Individual updates:

Stefano: Astrostatistics & Astroinformatics Seminars continue with ~30 people attending live, and 50 attending the recorded seminar. We realized that the variety of the addressed topics could be larger, so we started to enlarge the organizer team, by including more less-astronomer more-statisticians/data-analysts. Invitations just sent. If you have people working in the East not-astronomer, send me their name in case some of the invited people do not accept (we are already three in the west countries).

Ashish: planning S20 meeting to talk about astroinformatics at long term policy level; ZARTH (ZTF transients game) is being developed. Astronomy transient version of Pokemon GO.

Didier: Frontiers in Astronomy and Space Sciences: Astrostatistics (created 2019). 25 accepted papers, growing slowly. FASS has now an Impact Factor (4.055). Agreements with >600 institutions/countries.

Petr : My PhD. student Ondrej Podsztavek took participation in the Ariel Data Challenge 2022. The task was to estimate the composition of atmospheres of exoplanets from simulated spectra. He was at the 1st and 2nd place respectively in two tracks. He has shown the results at the NeurIPS and submitted them to the proceedings of this conference.

Ricardo: We have been working on Physics Informed Neural Networks where the approach to generating predictive models is not just data driven but incorporates knowledge (in the form of differential equations) to the loss function as part of the model training. We are getting close to having enough material to provide a tutorial on this topic.

Current/ongoing activities:

Plans:

- Create google form for automated processing of submissions from members

Other discussion:

Related meetings: OzFink: May 3-5, Melbourne, Australia

1. S20: Astroinformatics for sustainable development, Jul 6-7, Online
2. [Astroinformatics](#): Oct 1-6, Naples, Italy
3. KDD meeting

4. [European Astronomical Society](#) Annual Meeting 10 July – 14 July 2023 Kraków, Poland. [Symposium S4](#) 13-14 July 2023 Machine Learning prospective in Astrophysics: challenges, limitations, failures, and potentials
5. The 64th ISI World Statistics Congress Ottawa 2023 (<https://www.isi2023.org/>) will have two Astrostatistics Events: "[Statistics in Astronomy](#)" and administrative meeting for [Astrostatistics Special Interest Group](#) of ISI.

Equivalent of newsletter:

Broker writeup - invited [Fink](#)

New URL for Astrostatistics & Astrominformatics Seminars and archives:

<https://sites.google.com/view/iau-iaaseminar-new/>