FIRST Announcement

Workshop: 29 May - 3 June 2017 Location: Kerastari, Greece

The Labyrinth of the Unexpected: unforeseen treasures in impossible regions of phase space

URL: http://www.atnf.csiro.au/research/conferences/2017/Labyrinth/

** PRE-REGISTRATION is now open via the website at <u>http://www.atnf.csiro.au/research/conferences/2017/Labyrinth/prereg-form.html</u> Contributions are invited for consideration by the SOC. Participation will be limited to about 80 persons due to the size of the venue.

RATIONALE

About every 5 years in the village of <u>Kerastari</u> in the ancient region of Arcadia in Greece experts in radio astronomy from all around the world meet to discuss their latest scientific discoveries and astronomical techniques. (see previous workshops in 2002, 2007, 2012)

The next workshop, at the end of May 2017, will explore how radio astronomy has enabled flexible processing environments that are opening new windows on the Universe (discovery of FRBs is the prime example) and may open others (e.g. SETI). How have unexpected discoveries unfolded in a technical sense and in the new/traditional fora for scientific debate? Has anything benefited the process or held it back?

As we enter the era of the SKA, are we prepared for the technical challenges and, more importantly, do we have people prepared for serendipity? Or are we preparing a generation of SKA users to blindly extract data from catalogues to produce plots? Do these questions matter?

THEMES/TOPICS will include:

- * Transient Discovery Space Discoveries; Serendipity; Searches
- * Fast Radio Bursts (FRBs) discovery; controversies; interpretation

* **Search for ExtraTerrestrial Intelligence (SETI)** - Searches; Techniques; BreakthroughListen; Are FRBs ETI?

* **Radio Frequency Interference (RFI)** - RFI and its impact on discoveries; Terrestrial vs extra-terrestrial RFI

* **Propagation effects** - radio sources as probes of the ISM/IGM; impact?

* **Instruments** - new telescopes and techniques; large-scale computing and data mining; machine learning; real-time and commensal systems

* **Multi-wavelength, multi-messenger** exploration - EM follow-up of gravitational waves

* How can we maximise the success of **serendipity in the SKA** community?

IMPORTANT DATES

December 2016	1st announcement and pre-registrations begin.
March 2017	Final arrangements. 2nd announcement.
1 April 2017	Registration and hotel bookings open.
End April 2017	Hotel bookings close. Confirm attendance.
May 12, 2017	Registration closes. ** Extended to 10 June **
May 29, 2017	Arrival; registration; reception.
May 30 - June 2, 2017	WORKSHOP
June 3, 2017	Post-workshop excursions; Party.

SCIENTIFIC ORGANIZING COMMITTEE:

Matthew Bailes (Australia) Sarah Burke Spolaor (USA) Ron Ekers (Australia) Michael Garrett (UK) Samaya Nissanke (Netherlands) Antonia Rowlinson (Netherlands) Andrew Siemion (USA) Jill Tarter (USA) Steven Tingay (Italy) Tasso Tzioumis (Australia) — Chair

LOCAL ORGANIZING COMMITTEE:

Nectaria Gizani (Greece) John Seiradakis (Greece) Panagiota Tzioumi (Greece) Tasso Tzioumis (Australia) -- Chair

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