

SKA-France

Monthly bulletin

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News from Maison SKA-France

SKA-France Business Manager

The SKA-France team is happy to welcome a new member, **Léa Fournier**, who is joining us as **SKA-France Business Manager**.

After having obtained a PhD in sedimentology, Léa has been working in project management at the CNRS National Institute for Earth Sciences and Astronomy (INSU). Her current experience includes administrative, financial and logistics management of two projects, a research infrastructure and a research program with industrial partners. Within Maison SKA-France, she is in charge of the contractual (call for proposal, follow up on the MSF projects, ...) and the logistic management (juridical, administrative and institutional relationship), as well as of communication and outreach activities.

Evolution in the SKA-France membership

Based on the strong interests in the SKA project expressed by several entities of Thales Group, **Thales Alenia Space**, one of the founding members of Maison SKA-France, asked to extend their MSF partnership to the whole Thales Group.

It is our pleasure to announce that this modification has been unanimously approved during the last MSF Board meeting of February 18, 2019.



SKAO celebrates International Day Of Women And Girls In Science

Among the hundreds of researchers, engineers, managers, who are working with passion, enthusiasm and expertise in designing and building the Square Kilometre Array (SKA), there are many women.

To mark the International Day of Women and Girls in Science (February 11), the SKAO Communication and Outreach team spoke to female astronomers at SKA Headquarters and in partner institutions around the world (including France), to hear what they love about astronomy, who inspired them along the way, and what advice they have for the next generation of women and girls in science.

See related videos and interviews at [SKAO webpage](#).

Activities

Computing developments within SKA-France

On **February 22, 2019**, several MSF partners and collaborators interested in the **computational developments to fulfil SKA data processing needs** met at Côte d’Azur Observatory (OCA, Nice). The main aim of the discussion was to start organising man-power who could possibly provide support to the Bridging Phase in the post-CDR phase of the Science Data Processor (SDP) consortium.

On **February 28, 2019**, another meeting took place at Paris Observatory to **prepare follow-up actions of the project “SKALLAS”** (SKA paraLLel Architecture & Software). This SKA-related project, aiming at developing an adequacy algorithm architecture approach to implement new imaging and calibration methods for the SKA by respecting constraints of energy consumption, throughput, cost and calculation precision, was funded within the [2018 call for projects in Astro-Informatics launched by the Interdisciplinary Mission of CNRS](#) and has been resubmitted in 2019 after a successful accomplishment of the first year of work.



Participants to the meeting at OCA

Announcements

Next SKA Engineering Meeting

25-28 November 2019, Shanghai, CN

SKAO has recently circulated the first announcement of the **next SKA Engineering Meeting**. The workshop - hosted by the Ministry of Science and Technology, People’s Republic of China and Square Kilometre Array Organisation, and organised by Shanghai Observatory and SKA China Office in a venue to be announced - will be focused on the presentation and discussion of the **SKA System Design, Operations & Plans**.

Provisional programme:

- * Day 1: System CDR Preview
- * Day 2:
 - Session 1. Commissioning - To include talks by Precursors, Pathfinders and peer projects
 - Session 2. Engineering operations - To include talks by Precursors, Pathfinders and peer projects
- * Day 3:
 - Session 1. Observatory Science Operations
 - Session 2. Science Regional Centres
- * Day 4:
 - Session 1. Aspects of Procurement
 - Session 2. Splinter sessions - Advanced Instrumentation Programme & Further sessions to be announced

Registration opens on **April 15, 2019**. More information at the [meeting webpage](#).

Time series workshop

25-26 March 2019, Rennes, FR

[IRISA / INRIA](#) and [Orange](#) are organising a **workshop on the analysis of temporal data (time series)**.

Temporal data analysis is a very active area of research in recent years. The application challenges are numerous (medical, environmental, financial, energy, technical) and the increase in the amount of data available in recent years has had a considerable impact on research work in these areas.

Speakers from various domains will present different approaches to the analysis of temporal data (time series and sequences, statistical approaches and machine learning) and their applications.

These days offer the opportunity to present works on this theme with a wide space for discussion with the entire community. 1-2 page free format abstracts should be sent by e-mail by March 18, 2019.

Registration is free but mandatory.

Conference website: <https://project.inria.fr/tsdays/>

SuperMIGHTEE

5-7 June 2019, Kruger National Park, ZA

SuperMIGHTEE is a collaboration between the MeerKAT MIGHTEE project and colleagues at NCRA in India to co-observe the MIGHTEE deep fields with the upgraded GMRT. This unprecedented data set will have a profound impact on our understanding of galaxy evolution over cosmic time, how the Universe's neutral hydrogen evolves, and how cosmic magnetic fields originate and evolve in clusters, filaments and galaxies.

Important information: the participation to the meeting is **restricted to collaborators of MIGHTEE, who are invited to register as soon as possible since room is limited**. Scientists who are not currently part of the project and wish to have more information can contact Russ Taylor, meeting organiser from South Africa and Co-PI of the project. Very kindly, following the meeting announcement, Russ offered to discuss with possibly interested researchers of our community.

Conference website: <https://www.idia.ac.za/news-and-events/supermightee/>

New jobs at SKAO

We draw the attention of the community to the following roles which are currently advertised by the SKA Organisation:

- * **Radio Telescope Specialist Engineer** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 1 April 2019
- * **Project Manager: SKA-Low Infrastructure & Field Node** - Location: SKA Australia & SKA HQ, Jodrell Bank, UK ; Expires: 8 April 2019
- * **Project Manager: SKA-MID Digitisation** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 28 March 2019
- * **Project Manager: SKA-LOW Digitisation** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 28 March 2019
- * **SKA Operations Scientist** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 26 April 2019
- * **Business Application Analyst (Unit 4 Business World)** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 15 March 2019
- * **Radio Frequency (RF) Antenna Engineer** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 27 March 2019
- * **SKA Regional Centre Scientist (2 roles available)** - Location: SKA HQ, Jodrell Bank, UK ; Expires: 15 April 2019

A Procurement Category Specialist (Construction and Engineering) position will be announced soon. Further details of these posts can be viewed on the SKA website.

LOFAR Surveys Press Release

Thanks to the Low Frequency Array (LOFAR) radio-telescope, one of the main SKA pathfinders, an international team of scientists including French astronomers have published the first part of a huge deep low-frequency sky map of the Universe (LOTSS survey). It includes hundreds of thousands of galaxies unknown till now, and throws new light on research areas such as the physics of black holes and the evolution of clusters of galaxies.

A set of 26 papers devoted to these results are presented in a special issue of the journal Astronomy&Astrophysics dated February 19, 2019. A video summarises the majors challenges and results of this project, which had an impressive echo in the press worldwide, with interviews from major press agencies (such as AFP in France).

All information at the Paris Observatory web-page.



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News from South Africa

On the 13th of February, 2019, the Ambassador of France to South Africa, H.E. Mr Christophe Farnaud, visited the installation “MeerKAT” located in the desert of Karoo. MeerKAT serves as a “precursor” of the international and ambitious project SKA (Square Kilometer Array). Made up of 64 networked antennas, exclusively funded by South Africa, MeerKAT was built to give the country credibility when South Africa applied to host the instrument SKA. MeerKAT is now operational and is already the largest instrument in the world regarding its frequency range.

H.E. Mr Christophe Farnaud especially acknowledged the impressive work done by South Africa to develop a world-class research infrastructure, reflecting the country’s determination to be part of the major scientific and technological challenges of the 21st century.

He also recalled the strong involvement and commitment of French radio-astronomy community in the SKA project.



*Image & text courtesy:
French Embassy in South Africa*

News from Australia

Mrs Frédérique Vidal, French Minister for Higher Education, Research and Innovation, attended the Australia-France Joint Science and Innovation Meeting (JSIM) in Canberra, on February 27 and 28, 2019. This JSIM followed the visit to Australia last year of President Emmanuel Macron.

The JSIM was organised around a series of thematic workshops, one of them being focused on space and astronomy. This workshop identified a limited set of priorities for the Australian-French scientific cooperation, including radioastronomy as one of the most important. Among the perspectives for future collaboration in the field of radioastronomy, the preparation of SKA in both countries, associating academic institutions and industries, was recognised as a major axis for the coming years.



Image courtesy: PSL

Chiara Ferrari
for the **Maison SKA-France**