SKA-France

Monthly bulletin

December 2018

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News from Maison SKA-France

SKA-France warmly thanks Gabriel Marquette

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At the end of December, Gabriel Marquette left his position of Industry Relations Director at CNRS/INSU due to his retirement.

All the Maison SKA-France partners, as well as national and international collaborators of MSF, have expressed an unanimous acknowledgement of the importance of Gabriel's work for the SKA project. Gabriel has been an incredibly active, dynamic and enthusiastic member of the core-team of MSF. He has been the architect of the industry pillar of SKA-France and the strongest promoter of the innovative joint public-private approach which has recently allowed CNRS to join SKAO through the creation of MSF. In his role of French SKA Industry Liaison Officer and Member of the SKA Power Supply Options Workgroup, Gabriel has been a lively actor of the SKA scene also at international level. Fervent supporter of the need of green energy and of an internationalisation strategy for the SKA, he significantly contributed to the development of key fields such as energy production and storage, and procurement rules for the future SKA Inter-Governmental Organisation.

Gabriel: a warm thank you from all of us and... enjoy!!!



A few images illustrating the intense activity of Gabriel Marquette within the SKA project during the last three years



The SKA team is hiring

In the effort towards the finalisation of the SKA design and beginning of the telescopes' construction, the SKA Organisation is strongly reinforcing its team. December 2018 has seen several announcements for key positions. Current open calls include:

- Head of Finance (expires: January 15, 2019)
- <u>Domain Specialist</u>: MID Telescope (expires: January 14, 2019)
- Head of Information Technology (expires: February 15, 2019)
- <u>Director of Operations</u> (expires: February 28, 2019)

As soon as opened, all SKA Jobs information are advertised at the SKA website, as well as on social networks (Facebook, Linkedin, Twitter, ...). We will keep posting new announcements in the next months in the SKA-France monthly bulletin too.



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SKA-France in the SKAO News

CNRS being now a member of the SKA Organisation, **SKA-France activities from August to November 2018**, in particular those related to public outreach, are reported in the <u>December 2018 SKAO newsletter</u> for the first time together with the other member countries, and not in the "News from Observer Countries" section.

The PDF version of the SKA eNews is also available on line.

Activities

GENCI / SKA-France meeting

The SKA data needs will be huge, both at the telescope sites and in the SKA Regional Centres (SRC). Following the recommandation of a stronger interaction between SKA-France and the <u>GENCI consortium</u> from E. Verges (Ministry for Higher Education, Research and Innovation) during the Second SKA-France day, the SKA-France team was invited on December 4, 2018 to a meeting at the GENCI Headquarters (Paris).

The useful discussion allowed SKA-France representatives to illustrate the global expected data needs of the project, in particular in the light of the organisation of the future European SRC, to P. Lavocat and S. Requena (Director and Director of Innovation & Technology at GENCI).

Critical Design Review of the LFAA consortium

The Low Frequency Aperture Array (LFAA) Critical Design Review took place at the SKA Headquarters (Jodrell Bank, UK) on December 11-13, 2018. Reviewers and members of the consortium had intensive and productive presentations and discussions concerning the design work for the set of antennas, on board amplifiers and local processing required for SKA1-LOW. C. Ferrari, MSF Director, was one of the three external reviewers of LFAA CDR. More detailed information about the meeting and its outcome will be available soon at the SKA website and in the next SKA-France bulletins.

Thales R&T / SKA-France meeting

On December 17, 2018, MSF has been invited to visit the <u>Thales Research & Technology</u> (TRT) centre in Palaiseau (France), near Paris.

D. Dolfi and his team from the Physics Department of TRT gave the SKA-France representatives illustrations of their multidisciplinary research activities, mostly finalised to R&D for the Thales Group future in strategic fields, with some possible applications to the SKA, in particular for innovative cryogenics solutions.

Workshop "SKA-enabled science in the high redshift universe"

In October 2019, the French astrophysical community will gather to propose its strategy and priorities for the next 10 - 15 years. This prospective work, which takes place every 5 years and is organised by CNRS/INSU, is a very important event where, in particular, all infrastructure projects are presented and discussed. At the last Prospective in 2014, the French participation to SKAO was highly ranked.

In order to prepare the next prospective work taking into account the recent evolution of the SKA project and of the French interest and involvement into it, the "Action Spécifique SKA-LOFAR" and MSF have decided to foster the organisation of a series of 1-day workshops on the SKA science. The **first of these meetings** took place on **December 19, 2018**, at **Paris Observatory**. Organised by Benoit Semelin (Professor at Sorbonne University), it was **focused on the high redshift universe**, with an emphasis on the **Epoch of Reionisation**.

The workshop has gathered about 25 participants, including a number of PhD students and postdocs and several Dutch colleagues. Its program is available <u>on-line</u>.

The topics discussed covered observations of the Epoch of Reionisation/Cosmic Dawn with SKA pathfinders (LOFAR and NenuFAR), the very exciting prospects with SKA1, the mitigation of foregrounds, the use of simulations and deep learning for modelling the expected signal or extracting information from the observations. Other SKA-enabled cosmological observations such as intensity mapping were also discussed.



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The lively discussions have clearly demonstrated that the French community is extremely interested and active on this topic and already involved in preparing the observations with the SKA. As already shown in the French SKA White Book, the high redshift universe will certainly be one of the drivers of the French involvement in the SKA.

Announcements

European Week of Astronomy and Space Science 2019

24-28 June 2019, Lyon, France

The programme of the European Week of Astronomy and Space Science (EWASS 2019) is <u>online</u>, with abstract submissions and registrations open since December 4, 2018. The Scientific Organising Committee of EWASS 2019 has selected 14 Symposia, 41 Special Sessions and 9 Lunch Sessions, over a wide range of scientific topics. An SKA-related Special Session (SS29, "The role of European-led surveys in guiding future SKA1 science"), proposed by J. Wagg (SKAO), C. Ferrari (OCA) and R. Braun (SKAO), has been accepted and will take place on June 26, 2019.

Conference website: https://indico.skatelescope.org/event/467

Important dates before the meeting:

* March 3, 2019: abstract submission deadline

* February 10, 2019: early registration deadline

* June 23, 2019: regular registration deadline

Journées en Analyse et Traitement d'Images Astronomiques

24-25 January 2019, Strasbourg, France

A two-day workshop will be held to foster exchanges between researchers in image processing and astronomers. The goal of these days is twofold: they will provide an update on current research and open issues and they will stimulate exchanges between the two communities.

Invited speakers include: F. Chatelain (Gipsa-lab), A. Ferrari (Lagrange), J.-F. Giovannelli (IMS), Marc-Antoine Miville Deschênes (CEA)

The registration to this event is free. Breaks and lunch are offered, as well as dinner on January 24, 2019.

Conference website: https://jatia2019.sciencesconf.org

Astronomical Data Analysis Software & Systems

6-10 October 2019, Groningen, The Netherlands

The 29th annual international Astronomical Data Analysis Software & Systems (ADASS) conference will be held on October 6-10, 2019 at Martini Plaza, Groningen, The Netherlands. The International Virtual Observatory Alliance (IVOA) meeting will follow ADASS on October 11-13, 2019.

ADASS provides a unique forum for scientists and programmers concerned with algorithms, software and software systems employed in the acquisition, reduction, analysis, and dissemination of astronomical data, topics that are of the strongest interest to prepare the exploitation of future SKA data. An important element of the program is to foster communication between developers and users with a range of expertise in the production and use of software and systems.

Conference website: https://www.adass2019.nl

SKA-VLBI Key Science Projects and Operations Workshop

14-17 October 2019, Jodrell Bank, United Kingdom

Some of the highest priority science objectives defined by the SKA Organisation - together with the science working groups - require an angular resolution that can only be reached by current very long baseline interferometry (VLBI) networks, or the full SKA with baselines extending to thousands of km. To exploit the full potentials of the first phase SKA components for very high resolution applications, it has been proposed to coherently phase-up the core of SKA1-LOW and SKA1-MID, and make these powerful telescopes available for global VLBI observations.



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The aim of this workshop is to introduce the VLBI capabilities and observing modes of the SKA to the community, and present the latest results in the SKA high priority science areas where VLBI will have a strong impact. Ideas and possible strategies for major SKA-VLBI Key Science observing programmes will be discussed, together with the impact of global VLBI observations for astronomical research in the future in general. In addition, participants will seek input regarding the SKA-VLBI requirements for the future SKA regional Data Science Centres. Save the dates. A second announcement with more details is expected in early 2019.



Chiara Ferrari for the Maison SKA-France

