

SKA-France

News from the Coordination

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SKA-France Coordinator

Outline

1. News about France within the technical and scientific consortia
2. Organisation of the French SKA White Book
3. Contacts between SKA-France and the European partners

SKA technical consortia



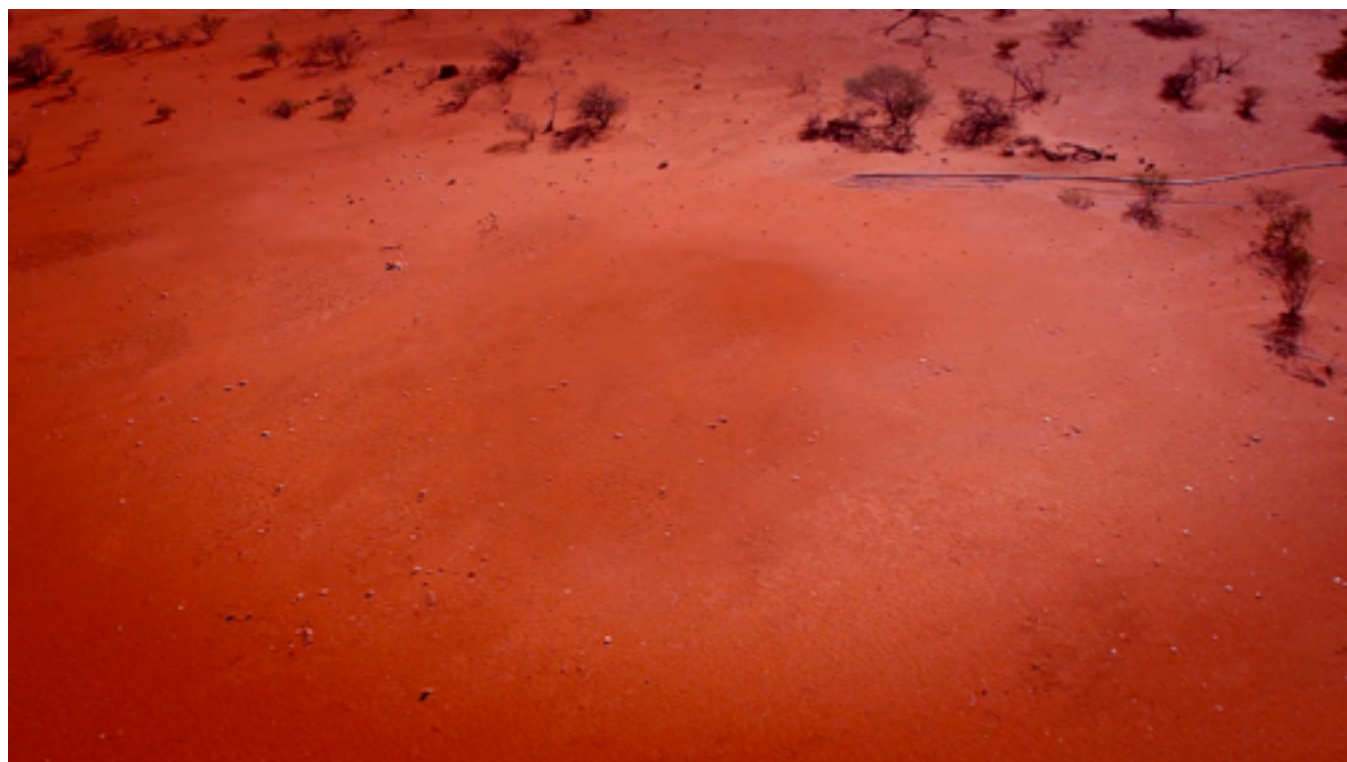
SKA1-LOW (AUS)

- 130,000 dipoles
- Frequency coverage: 50 - 350 MHz
- Max baseline: 80 km



SKA1-MID (SA)

- 133 15m dishes + **MeerKAT**
- Frequency coverage: 0.350 - 16.7 GHz
- Max baseline: 150 km



SKA technical consortia



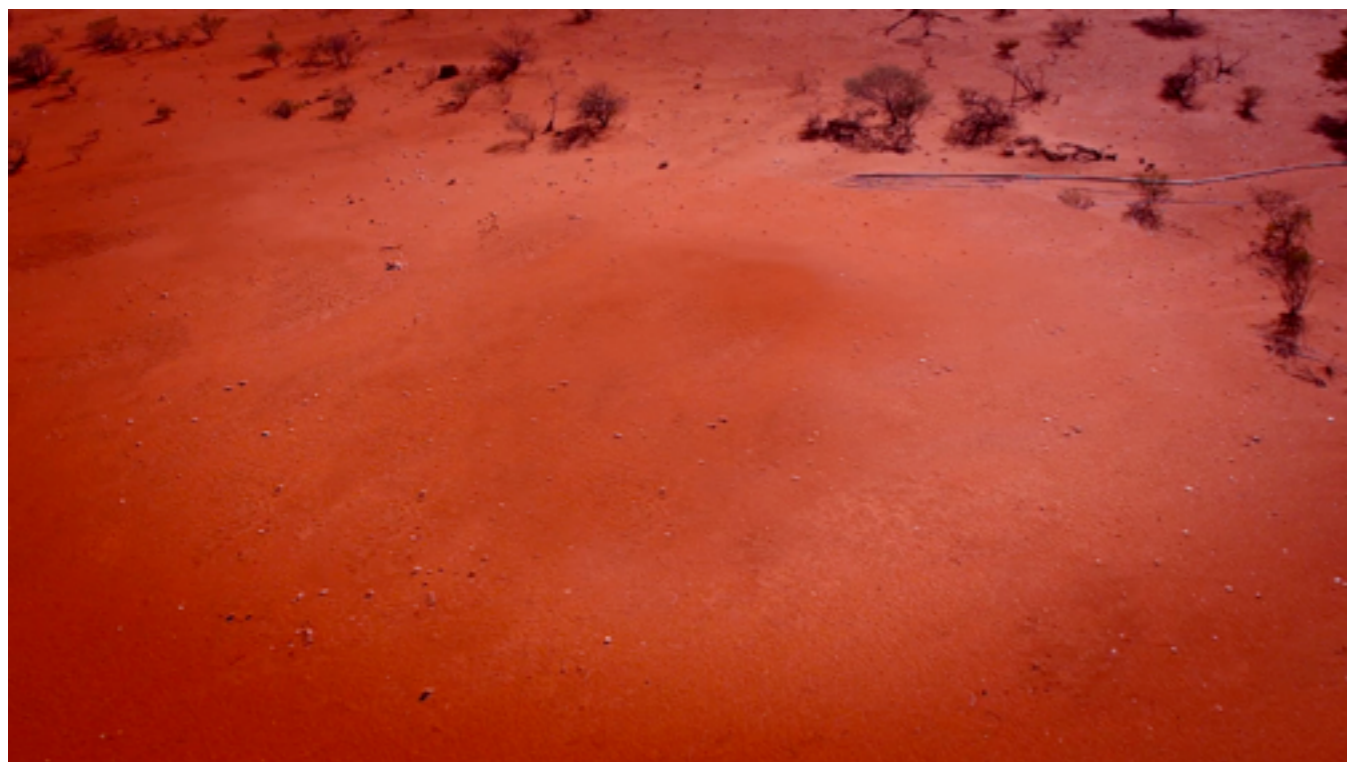
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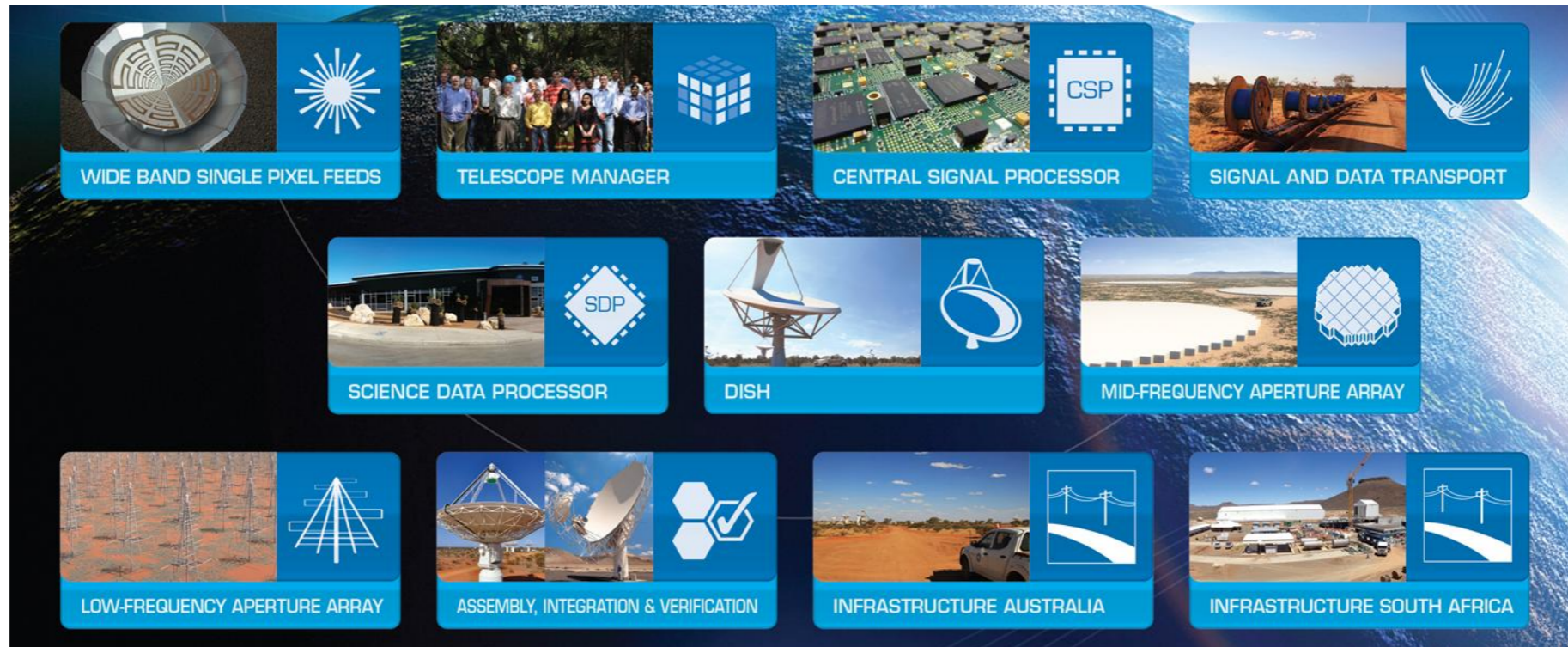


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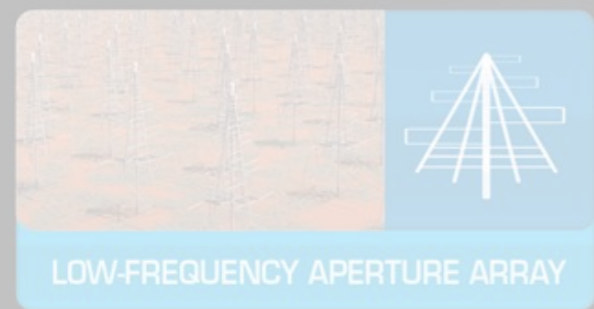
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SKA technical consortia



France within the SKA technical consortia



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France within the SKA science teams

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Françoise Combes

Nominated co-chair of the Extragalactic spectral line SKA Science Working Group

France within the SKA science teams



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Chiara Ferrari

- Elected chairwoman of the General Assembly of the H2020 AENEAS project
- Nominated member of the SKA Science Assessment Team



France within the SKA science teams



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Marc-Antoine Miville-Deschênes

PI of an SKA related project financed within the CNRS MASTODONS programme

French SKA White Book



- (a) **February-March 2017:** identification of the articles to be written
- (b) **March 21-22, 2017:** general workshop (with contacts for each research field)
- (c) **Mid-May 2017:** articles are sent to the SKA-France coordinator
- (d) **September 2017:** White Book is ready for publication

SKA-France within Europe



February 1st, 2017 (Paris)

Meeting of the Scientific SKA Coordinators of:

- France
- Germany
- The Netherlands
- Spain
- Portugal
- Sweden
- Swiss
- UK

- (a) In which fields a collaboration with European partners can facilitate our path towards the SKA?
- (b) Interest in participating to international SKA industry days and/or focused meetings?



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Scientific results
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Molecular gas
Nuclear activity
Technological developments
Participation in the SKA SDP
VO archives and tools
Distributed computing
Ongoing projects
AENEAS
SKA-Link
BIOSTIRLING-4SKA
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Publications
Refereed papers
PhD Thesis
Master Thesis
Conferences
Organized events

SKA-Link: combining knowledge to pioneer Big-Data solutions for SKA Data Centres

NEWS!

[SKA-Link kick-off meeting - 3rd & 4th April 2017](#)

SKA-Link is a 2-year project led by the [AMIGA team](#) that belongs to the i-LINK programme (Programa CSIC Conexión Internacional "i-LINK"). This call has the objective of promoting international scientific collaborations with foreign institutions.

The AMIGA team aims to create a deep understanding of the best technical strategies for successfully exploiting the immense flow of science-ready data that SKA will generate. To achieve this goal, it has taken advantage of its experience in e-Science and SKA-SDP (SKA Science Data Processor) membership to establish a collaboration and produce a general framework of Best Practices to be considered in the design of the SKA Regional Centres.

In order to elaborate this general framework of Best Practices, SKA-Link will promote the collaboration between 1) [key members of the SDP consortium plus the ones involved in the design of SKA Regional Centres](#), 2) [experts on cutting edge e-Science technologies for the scientific exploitation of Distributed Computing Infrastructures \(DCIs\)](#) and 3) [Fujitsu Laboratories of Europe](#), making of SKA a reference, not only in science and technology, but in the scientific methodology too.

In summary, the 3 main objectives of SKA-Link are:

1. To make an **inventory** of technologies enabling scientists to exploit scientific data. For designing the SKA Regional Centres it will be necessary to have a deep knowledge about the state of the art tools of DCIs to perform efficient exploitations of the scientific data
2. To **assess combinations of those technologies** supporting advances in the scientific methods.
3. To **describe the properties that SKA Regional Centres have to fulfil to be considered a reference in science, technology and scientific methodology**. They will provide a framework that assists the astronomers to exploit the SKA data.

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SOC and LOC



Dome Symposium

NEW FOUNDATIONS FOR A SMART SOCIETY

18-19 May 2017, Dwingeloo

Venue: ASTRON and IBM Center for Exascale Technology

Organizing Institutes



Programme Thursday 18 May - Science

The aim of this first session is to provide an overview of the Dome project, its targets, results, and the impact on the Square Kilometre Array, and on society and industry.

If you are interested in this topic, please [register here](#).

08:30	Registration & coffee	
09:00	Welcome	
The New Computing Era (of: Tackling the Computing Complexity Barrier)		
09:15	Views on the future of computing and science data centres	Thomas Sterling, Director CREST
09:45	SKA & beyond Moore's law, a forward look	Ton Engbersen, IBM
10:00	Architecture modelling	Gero Dittmann, IBM
10:15	Break - coffee/tea + demo's	
Smart Algorithms		
10:45	The SKA SDP signal processing	Ronald Nijboer, ASTRON
11:05	Data Reduction and Image Formation for Future Radio Telescopes	Shahrazad Naghibzadeh, TU Delft
11:25	Machine learning in radio astronomy imaging	Max Welling / Patrick Putzky, Universiteit van Amsterdam
11:45	Novel algorithmic approaches in radio astronomy	Paul Hurley, IBM
12:15	Lunch + demo's	
Novel Architecture Foundations		