

# Standing Committee for Science Priorities (CSP)

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**CSP:**

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*lots of help from: Janet Evans (Exec Secretary)*



# Notes from this meeting

- **IVOA addressing scientific needs**
  - Science / Technical / Organisational aspects
- **Science Sessions** - Local inputs, IG science : *Theory, TD*
- **KDD session** - wide ranging discussion: data mining science, but also reality checks for implementation
- **Solar System science** - interoperability opening up new scientific possibilities
- **Applications** - realising benefits of recent standards

# Notes from this meeting

- **Excitement** - realising All-Sky VO astrophysics - Cubes, Event Streams, HiPS, complex queries
- **Engagement:** participation of data centres/projects
- **Challenges:**
  - Finding the most effective ways of interacting with the science community.
  - Defining the roadmap with achievable steps toward the grand vision of the VO

# Science Session

Time	Topic	Speaker	File
9h05 - 9h20	Data Oriented Astronomy in China	Ming ZHU (NAOC)	
9h20 - 9h35	Science visions for the VO	B. Merin (ESA, IVOA CSP)	<a href="#">pdf</a>
9h35 - 9h50	Theory and the VO	Franck Le Petit (Obs Paris, IVOA Theory IG)	
9h50 - 10h05	Time Domain science user perspective	Ada Nebot (CDS, IVOA Time Domain IG)	<a href="#">pdf</a>
10h05 - 10h30	Lightning Talks "Science with the VO, What I need from the VO, Ideas for the VO"		
	1. Astronomical Data Processing & Astronomical Workflow Scheduling in cloud".	Qing Zhao (Tianjin University of Science & Technology)	<a href="#">ppt</a>
	2. Gala-PS1-SDSS (GPS1) proper motion catalog across 3-Pi sky	Haijun Tian	<a href="#">ppbx</a>
	3. Galaxy evolution with the spatial distribution of Globular Clusters: how the VO has helped, and could help even more.	Raffaele D'Abrusco (SAO)	<a href="#">pdf</a>
	4. Simulations and VO	Jenny Sorce (CDS)	<a href="#">pdf</a>

- Lightning Talks : "Science with the VO, What I need from the VO, Ideas for the VO"
  - To be pursued for future interior meetings - comments welcome!



*Science Priority Areas*

## Multi-dimensional Data

Radio astronomy, Integral Field Spectroscopy, high energy, polarization, simulation, data mining datasets + ...

## Time Domain Astronomy

Time Series, light curves, transient event reports, +...

# Multi-d Data Status

- **Milestone - IVOA multi-d data standards**
  - *First set of standards to address Discovery, Access, Simple cut-out of multi-d data*
    - *Obscore 1.1, SIA 2.0, DataLink 1.0, SODA 1.0*
- **Implementation phase** - Implement cut-outs!!
  - key for the next phase and more complex operations on cubes

# Time Domain Status

- Convergence of efforts of TDIG, CSP, and requirements for DAL and DM developments
- Engagement of projects - ZTF, LSST +
- Consolidation of Time Domain use cases and requirements to be coordinated - CSP, TDIG
  - aim for definition of minimal requirements

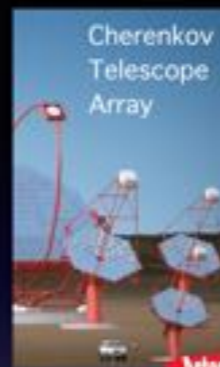
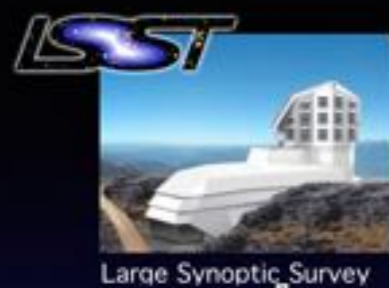
# 2013

- CyberSKA
- ALMA(2), JVLA, VLBA
- CALIFA
- MUSE
- ASKAP (VAST)
- Chandra
- ASTRON
- LSST
- CoRoT, Kepler
- LOFAR

# 2014

## Projects engaged

- ALMA
- LOFAR
- SKA - ASKAP, MWA, MeerKAT
- JVLA / NRAO
- MUSE
- CALIFA
- LSST
- CRTS
- CTA
- JIVE / VLBI
- JWST
- + liaisons via VO projects



FOCUS SESSIONS  
2016



... 2018?

2016



# CSP Activities

- Consolidate the use cases and requirements for Time Domain, and identify use cases coming from KDD
- Follow multi-d implementation phase (+ next requirements)
- Focus Sessions for May 2018 Interop meeting (?)
- Explore topics for science user perspective
  - communications, examples, feedback
  - Visions for VO Portals, and integration of VO in commonly used Astronomy tools

*New Leadership*