Committee for Science Priorities

Opening Plenary, October 29, 2015

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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, +...

- Need to ensure that these are accessible and useable within the VO

Priority Areas

- Convergence of 1st set of Multi-d standards
  - Finalising stds will allow moving to the next steps
  - Implementations being presented here
  - Feedback is precious
- Time Domain
  - Re-focusing required
  - Time series area needs to be re-motivated
  - Looking for ‘champions’ of the cause
  - Please participate in TD IG

CSP renewal

- Terms of Reference proposed to Exec
  - Motivation
  - Tasks
  - Composition
- New members proposed
  - Greatly needed
  - Connections to LSST and ESA
  - Further considerations in progress

Terms of Reference *(summary)*

Motivation and Objectives

- High level scientific requirements for the VO of major astronomy projects and of the wider astronomy community as input to the setting of priorities for IVOA

Tasks

- Consult as widely as needed
- Gather of use cases and requirements of major astro. projects
- Develop plans to vigorously encourage the creation and implementation of infrastructure, services and tools
- Champion priority topics

Composition

- Defined by Exec, 3 year terms, involvement of projects

Engagement with community

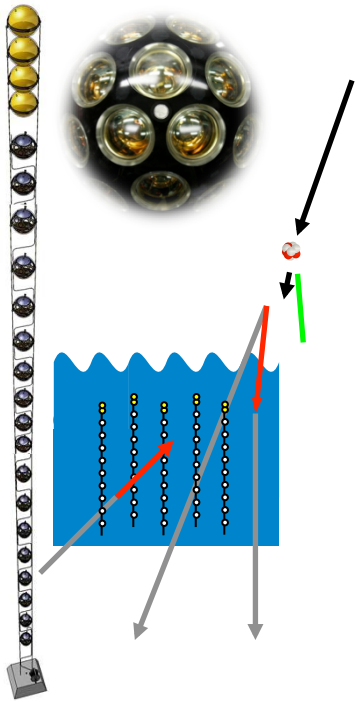
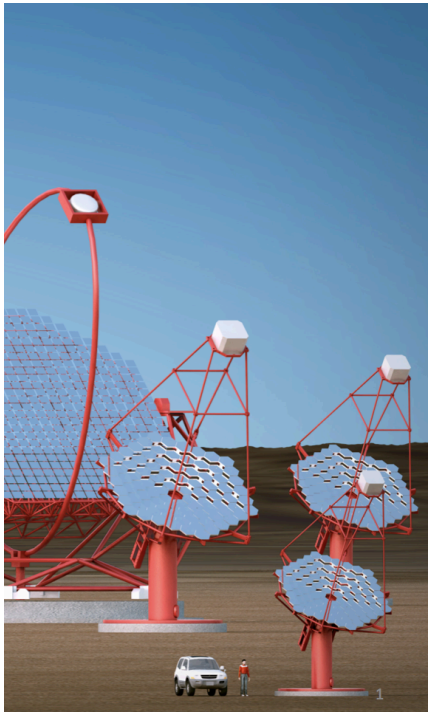
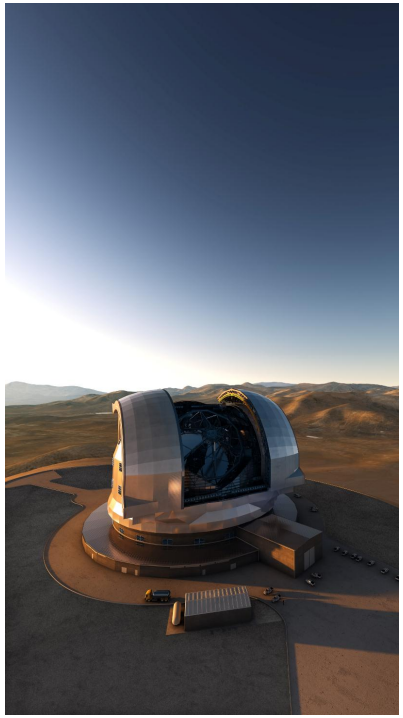
- Mechanisms for making major astronomy projects ‘participants in’ (not ‘customers of’) IVOA
  - Focus session/event – Cape Town 2016
  - Discussion here at the CSP session (Sunday 9-10h30)
- Need input on how to really gather use cases and requirements – at the right level for IVOA
- Realistic resourcing of activities

Process

- Process of use cases & requirements to guide standards development
  - Worked fairly well for Multi-d
  - Discussion of best way to organise this
  - Very important for greater engagement with big projects
  - Realistic resourcing in context of state of current IVOA member projects and involvement of major astronomy projects

Going further with project input:

Make the big projects '**Participants**' in the development of the VO, e.g. ASTERICS

Cluster of ESFRI projects and their pathfinders, and relevant research infrastructures

Emerging Priorities

- ‘Big data’
- ‘Run the code next to the data’

- But also…
  - Addressing issues of spectra in the VO
  - Connections to well used packages (Astropy etc.)
  - VO usage metrics (service usage etc.)
  - VO awareness/branding
  - Renewal of training materials – for VO schools etc.
  - Embracing operational community solutions
  - +…