

# Solar System Interest Group

## Southern Spring Interop 2017

### Santiago, Chile

B. Cecconi (chair)

S. Joy (co-chair, waiting for confirmation...)

# Ongoing actions

- Semantics:
  - UCD for solar and planetary sciences
  - Observation facilities
- Time Domain:
  - Study of VOEvent-2.1
- Registry:
  - strong issue with security rules at RoR
- Discussions:
  - TAP/ADQL polygons
  - STC-2 implementation

# Solar and Planetary interoperability

- Sessions in conferences:
  - EPSC (50 attendees + posters), AGU (upcoming, dec 2017)
- Special issues:
  - Planetary and Space Sciences: in press, 14 papers
  - Earth and Space Science + Journal Geophysical Research: after VESPA-GIS workshop and LPSC workshop
  - Space Weather: planned paper on VOEvent applied to solar and planetary events/prediction
- Workshops:
  - PSIDA (Planetary Science Informatics and Data Analytics), Big Sky, Montana, April 2018.
  - VESPA implementation workshop, Prague, Czech Rep, April 2018.

# Highlight :

# Space physics remote sensing

EPN-TAP service under development for planetary and solar observations:

- ◆ **IAS**/MEDOC (15 solar databases, with more than 15 million images)
- ◆ **ObsParis**/BASS2000 (daily quicklooks for all wavelengths)
- ◆ **ObsParis**/HELIO (solar feature catalog, update in progress)
- ◆ **Nançay**/NDA (daily Sun and Jupiter decametric spectrograms, starting 1990)
- ◆ **ESAC**/Solar Orbiter archive: TAP service under development + FITS and CDF files.
- ◆ **JAXA**/HISAKI TAP service online (including EPNcore)

# Highlight :

# Space physics remote sensing

Implementation of a data distribution webservice (**das2server**).

- ◆ Solves the network bottleneck for data visualization:
- ◆ server provides data with resolution set by client, also includes a cache system to speed up future queries.
- ◆ Already used in USA for Space Physics (Univ. Iowa, GSFC...). Test implementations in France :  
ObsParis/LESIA, Nancay/NDA (and other instruments)...
- ◆ Need for a registry to declare/find services/datasets.
- ◆ New SAMP messages to be tested:  
type= das2stream, with url of end point, dataset name, and optional start/end times.

# Work with data centers

- **CADC**: on going work to implement EPNcore on TAP interface. Status?
- **MAST**: new TAP interface. EPNcore?
- **ESAC** astronomy mission archives (Herschel, XMM...): study EPNcore on TAP interface.  
On going work for Planetary Science Archive (PSA)
- **NASA/JPL**: on going assessment to implement EPN-TAP on full legacy archive of Cassini
- **CDS**: what to do with solar and planetary A&A datasets ?  
EPNcore service ?

# IPDA project

- IPDA steering committee last 1 week ago.
- Co-chair proposed: Steve Joy, from UCLA. Archive and operation of NASA planetary missions. Part of NASA/PDS archive.
- Assessment of EPN-TAP: on going.  
Comparison with PDAP (Planetary Data Access Protocol).
- NASA/PDS dictionary mapping:
  - PDS4-IM (information model) allows mapping between dictionaries. On going work to describe and map EPNcore in PDS4-IM