



Applications Working Group

Closing Session

IVOA Interop, College Park, November 2018

Chair: Tom Donaldson

Vice-Chair: Raffaele D'Abrusco



Program

<u>Speaker</u>	<u>Title</u>	<u>Material</u>
Brian Van Klaveren	Felis: Describing Catalogs in JSON-LD	pdf
Thomas Boch	On the fly generation of JPEG HiPS tiles	pdf
Matthieu Baumann	New Python and Javascript developments at CDS to query the MOCServer for quickly retrieving data collections of interest	pdf
Mathieu Servillat	OPUS: a provenance enhanced job controller - A reference implementation for the Provenance DM	pdf
Laurent Michel	Reading VODML annotations with model-independant Java code	pdf
<u>Speaker</u>	<u>Title</u>	<u>Material</u>
Pierre Fernique	MOC standard 1.1 extension / ASCII MOCs	pdf
Hendrik Heintl for Markus Demleitner	Progress towards a VODataService 1.2 WD	
Pat Dowler	CADC lightweight OAI registry implementation	pdf
Brian Major	Updates on cadc-tap: an astroquery TAP client	pdf
Hendrik Heintl	Recent features implemented in PyVO	pdf
Tom Donaldson	Python Development Discussion	pdf



Themes

- Python
- VOTable
 - [VODML Mapping](#)
 - TIMESYS
- HEALPix
 - MOC
 - HiPS
- Authentication



Themes

- Python (Everywhere)
- VOTable (TDIG, DM)
 - [VODML](#) Mapping
 - TIMESYS
- HEALPix (Registry, DAL)
 - MOC
 - HiPS
- Authentication (DAL, GWS, Registry)
- Need to support cross-WG efforts



Python

- Many new developments
 - In Astropy, AstroQuery, PyVO, elsewhere
- Interesting discussion
 - Within the Astropy ecosystem,
 - Where does VO code belong?
 - Promote visibility of code
 - Avoid duplication
 - Avoid VO branding/naming/jargon?
 - Who should decide, and how? Consensus(?):
 - We (the IVOA as an organization) should **not** decide.
 - We (developers) should help decide within the open source processes of Astropy.



VOTable

- VO-DML Mapping
 - VO-DML-Lite proposal moves the discussion forward
 - [VODML Lite TS.pdf](#)
 - [VODML Lite JAVA API.pdf](#)
 - How to move forward?
 - Clarify syntax/semantics of VO-DML-Lite proposal, and exercise it on important use cases.
 - Need a prioritized list of use cases.
 - Does this exist? If not, how do we create it?
 - Need to drop less important use cases to handle important ones sooner.
- Proposed TIMESYS element ([Nebot TDIG Interop2018B-TIMESYS.pdf](#))
- Those items require new VOTable version(s)
 - TIMESYS is straightforward change, so by itself could be done quickly.
 - How often can we roll out a new version? Don't want to break too many operational tools.
 - Are there other changes we should be considering?



HEALPix

- MOC
 - Moving forward with making ASCII MOC official: [MOC extension 1.1 Fernique.pdf](#)
 - Could use low-order MOCs to describe resource coverage in Registry
 - Astropy and JS support for MOC regions and queries: [cds.astroquery-discovery-widget.pdf](#)
- HiPS
 - On the fly generation of JPEG [HiPS](#) tiles: [Apps-TBoch-generation-jpeg-hips-tiles.pdf](#)
 - HiPSToFITS prototype (and ideas for SIAv2 & SODA next): [HiPStoFits Prototype IVOA.pdf](#)



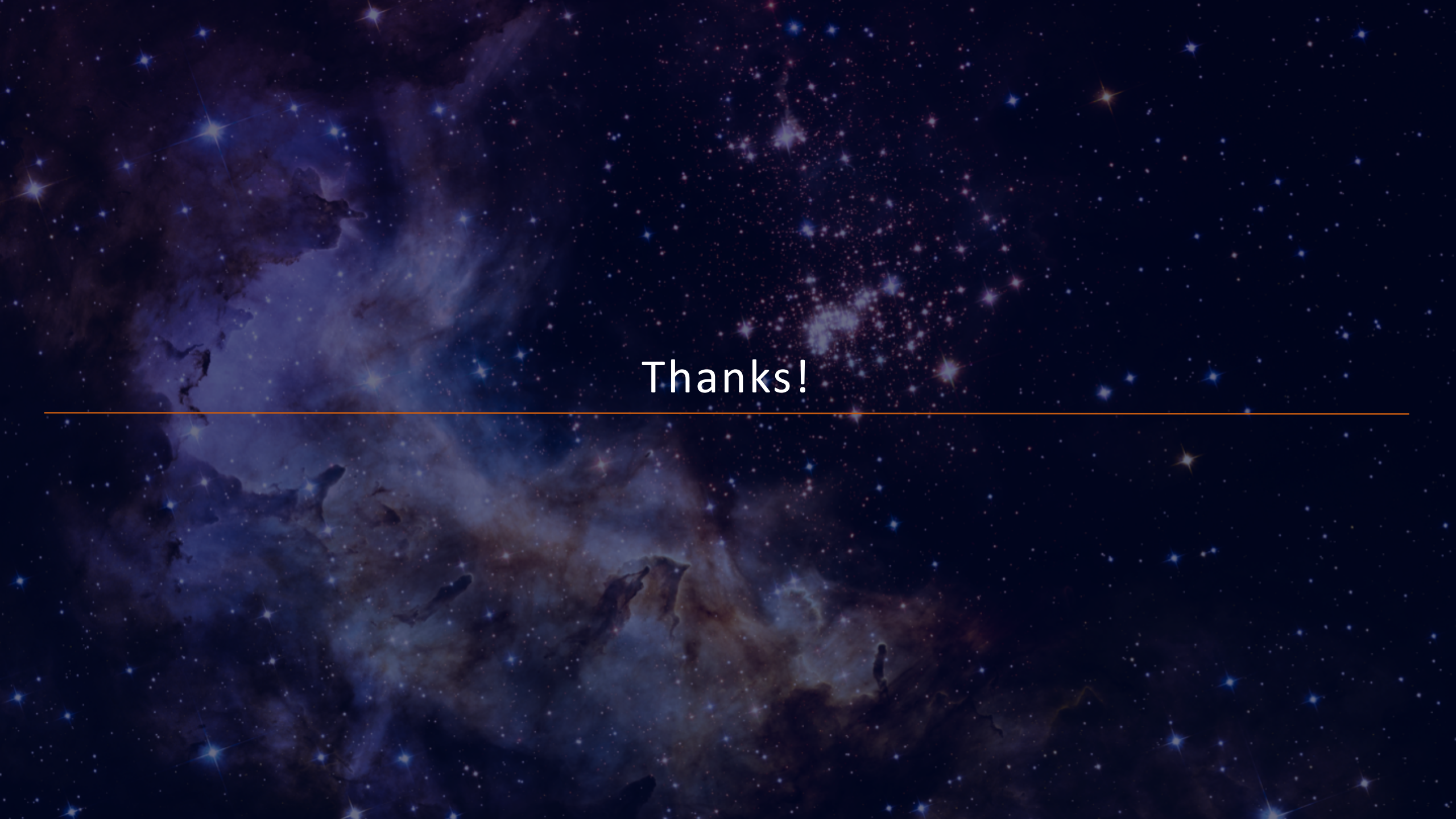
Authentication

- DAL/GWS/Registry joint session devoted to this.
- Applications are obviously affected.
 - CADC TAP Python implementation: [cadc-tap.pdf](#)
 - General data access clients: TOPCAT?, Aladin?, Etc.
 - Need to discover what AuthN technique to use for a service
 - Hopefully can use 3rd party libraries in most cases



Need to support cross-WG efforts

- Communication
 - Mail list: apps@ivoa.net
 - Subscribe at <http://mail.ivoa.net/mailman/listinfo/apps>
 - Info and lists for all groups: <http://www.ivoa.net/members/>
 - Slack channel: [#applications](https://ivoa.slack.com)

A deep blue and black night sky filled with numerous stars of varying sizes and colors, including bright blue and white ones. A large, wispy nebula with shades of blue, purple, and brown is visible on the left side. The word "Thanks!" is written in a clean, white, sans-serif font in the center of the image. A thin, horizontal orange line spans the width of the image just below the text.

Thanks!