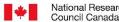# PyVO Status Update

Adrian Damian – Canadian Astronomy Data Centre

Tom Donaldson - Space Telescope Science Institute

Outline

- What is PyVO?

- Short history

- Current status

- Future plans

What is PyVO?

PyVO is an open source package providing access to remote data and services of the Virtual observatory (VO) using Python.

- Developed under the `astropy` umbrella

- Functionality:

  - Data access (TAP, SIA, SLA, SSA interfaces)
  - Registry search
  - Supports both anonymous and authenticated access

- Used by `astroquery` to access data in ALMA, CADC and NASA Exoplanet Archive

Short History

- May 2019 – Astropy organization added PyVO as an affiliated packages

- Sep 2019 – version 1.0 released

- Jun 2020 – version 1.1 released

- Nov 2021 – version 1.2 to be released

- `astroquery` dependency – high percentage of user data access

Where Are We Currently?

- V 1.2 – small new features in regTAP and VOResources

- a few "infrastructure" PRs (work required)

- 40 open issues. Some are old and need purging

- TAPPlus – little progress. https://github.com/astropy/pyvo/pull/274 (CADC prototype for table creation/deletion, table content upload, index creation – TAP1.2).

- No resolution for experimental code

Future Plans

- Possible new directions:

    - SAMP move from `astropy` (PR239)

    - Data model implementations

    - New clients: VOSpace

    - Higher level applications (apps module)

    - Improved usability in Registry Search (Wed GatherTown)

    - Improved documentation, tutorials, etc.

We Need You!

> "In open source, we feel strongly that to really do something well, you have to get a lot of people involved."
>
> Linus Torvalds

- How to reach us:
  - GitHub (`https://github.com/astropy/pyvo`)
  - Slack
    - `#pyvo` channel on Astropy org
    - `#applications` channel on IVOA)
  - IVOA mailing list (`apps@ivoa.net`)
- Next PyVO meeting on Nov 10th at 16:00(UTC).