



DP0 Delegate Assembly: *Delegate Presenters!*

Speakers: Sylvie Dagoret-Campagne

Friday Nov 19 2021, 9am-11am US Pacific

Presented by
the Rubin Observatory Community Engagement Team



U.S. DEPARTMENT OF
ENERGY

Delegate Assembly: *Delegate Presenters!*

turn
recording
on!!

Today's speakers: Sylvie Dagoret-Campagne
Rubin Staff:

9:00am -- Welcome.

Suggest a breakout topic while we get set up, and:

- Log in to the Rubin Science Platform
 - URL in any browser: data.lsst.cloud
- Open in the Notebook Aspect:
 - (instructions next slide)

9:05am -- Announcements

9:10am -- Presentation

10:00am -- DP0 Delegate Profiles

10:10am -- Breakouts begin

Breakouts (*if in italics, it's still just a suggestion*)

| Room | Topic | Facilitator (make co-host): |
|------|--|-----------------------------|
| main | general RSP Q&A, tech Qs for Rubin staff | |
| 1 | Structure from Tract Continued | Sylvie |
| 2 | resolved stellar populations | Alex |
| 3 | <i>?supernovae?</i> | |
| 4 | | |
| 5 | | |
| 6 | | |
| | | |

How to get the Notebook for today's tutorial

Today's tutorials are in the the Git repository at: <https://github.com/rubin-dp0/delegate-contributions-dp01>

These instructions to 'git clone' the repository will download the contents to your RSP home directory.

1. Log into the Notebook Aspect of the RSP at URL data.lsst.cloud (medium server ok), and launch a terminal.
2. In the RSP terminal, type "git clone <https://github.com/rubin-dp0/delegate-contributions-dp01.git>".
3. Use the left menu to navigate the directories and open Jupyter Notebooks.

\$ _ Other

\$ _

Terminal

File Edit View Run Kernel RSP Tabs Settings Help

Filter files by name

/ delegate-contributions-dp01 /

| Name | Last Modified |
|-----------------------------|---------------|
| CoaddDisplay | seconds ago |
| example | seconds ago |
| image_catalog_interactivity | seconds ago |
| supernovae | seconds ago |
| CheatSheet.txt | seconds ago |
| GM_notebook_test.ipynb | seconds ago |
| README.md | seconds ago |

```

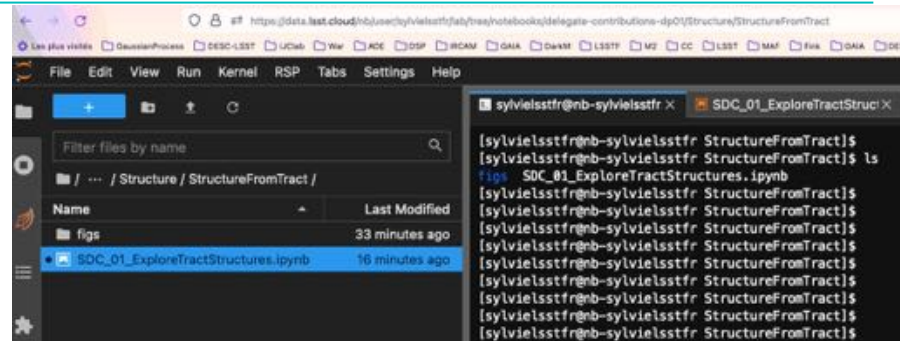
[melissagraham@jupyter-melissagraham ~]$ git clone https://github.com/rubin-dp0/delegate-contributions-dp01.git
Cloning into 'delegate-contributions-dp01'...
remote: Enumerating objects: 178, done.
remote: Counting objects: 100% (178/178), done.
remote: Compressing objects: 100% (151/151), done.
remote: Total 178 (delta 63), reused 61 (delta 16), pack-reused 0
Receiving objects: 100% (178/178), 283.02 KiB | 2.89 MiB/s, done.
Resolving deltas: 100% (63/63), done.
[melissagraham@jupyter-melissagraham ~]$ cd delegate-contributions-dp01/
[melissagraham@jupyter-melissagraham delegate-contributions-dp01]$ ls
CheatSheet.txt  example  image_catalog_interactivity  supernovae
CoaddDisplay    GM_notebook_test.ipynb  README.md
[melissagraham@jupyter-melissagraham delegate-contributions-dp01]$

```

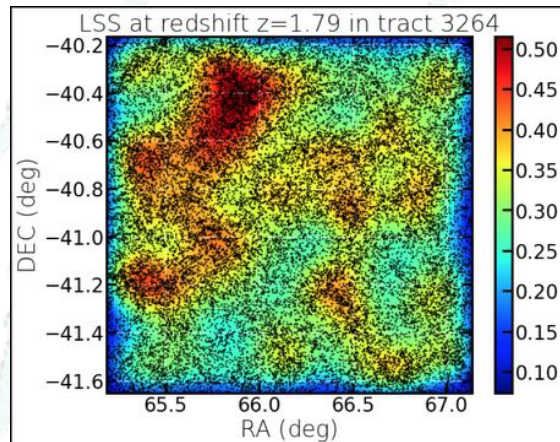
Notebook on searching for LSS

In a shell window:

```
$ cd $HOME
$ git clone
git@github.com:rubin-dp0/delegate-contributions-dp01.git
$ cd
notebooks/delegate-contributions-dp01/Structure/StructureFromTract
$ ls
figs/ SDC_01_ExploreTractStructures.ipynb
```




Goal : choose a tract, use holoview tools to find the redshift slice to plot LSS structure



Volunteers to Present on Jan 14?

Delegate Assemblies (dp0-1.lsst.io)

- **first hour:** presentations
 - **suggest a topic you'd like to learn about, or:**
 - **volunteer to present your DP0 work**
 - **slides of work in progress would be great!**
 - **code/NB tutorial format is not necessary**
- **second hour:** breakout discussions
 - Q&A with Rubin staff
 - DP0 science working groups






DP0 Working Groups (ls.st/clo5677)

- grassroots formation, self-organized
- share notebooks in github.com/rubin-dp0

Stack Club: co-working biweekly on Fridays from 9-11am US Pacific (alternating with the assemblies)

| | | | |
|-------------------|--|---|---|
| 2021-11-19 | Sylvie Dagoret-Campagne and one more delegate presenter? | delegate working groups | Sylvie Dagoret-Campagne and the CET |
| 2021-12-03 | Image Processing | delegate working groups | Andrew Bradshaw (Rubin Camera Subsystem Team) |
| 2022-01-14 | delegate presenter(s) | delegate working groups | TBD |
| 2022-01-28 | Special Session on DP0.1: A Half-Year In Review | small group discussions for delegate feedback | The Community Engagement Team |
| 2022+, if desired | delegate presenter(s) | delegate working groups | TBD |

delegate-contributions-dp01

 Jupyter Notebook
  2
  0
  0
  0
 Updated on Jul 15

“Delegate Profiles”

A new feature of our Delegate Assemblies.

Who: For today, a ~random subset of delegates; in the future, all will be invited.

What: A single-slide, 30-second introduction to your science interests regarding Rubin DP0.

When: At the midpoint of DP0 Delegate Assemblies.

Why: To enable networking between delegates, and inspire collaborative working groups.

How: When invited, create a slide and then speak to it for 30s when called upon.

Keep in mind that all delegates are encouraged to share their DP0 interests and work on [Community.lsst.org](https://www.lsst.org), in our Data Preview 0 category, at any time!

DP0 Delegate Profiles

photos ok

plots ok too

Copy paste this template slide and fill it in for yourself.

Remember you'll just have 30s to speak. Thank you for participating!

Start with basic information such as:

- Name
- Affiliation
- Career Level

Then add some sciencey stuff like:

- Rubin Science Interests
- DP0-Specific Interest (if you've formed one yet)
- Interested in collaborating on any DP0 investigations?
- Things you want to learn

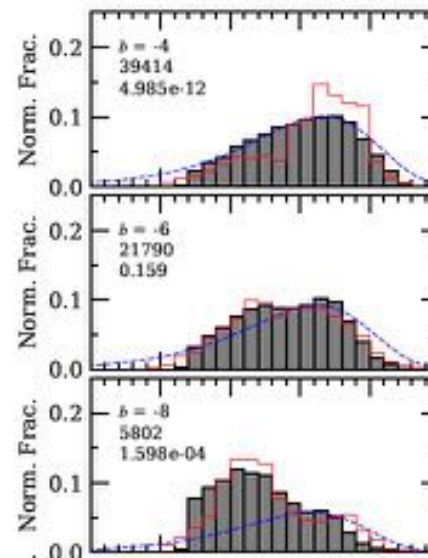
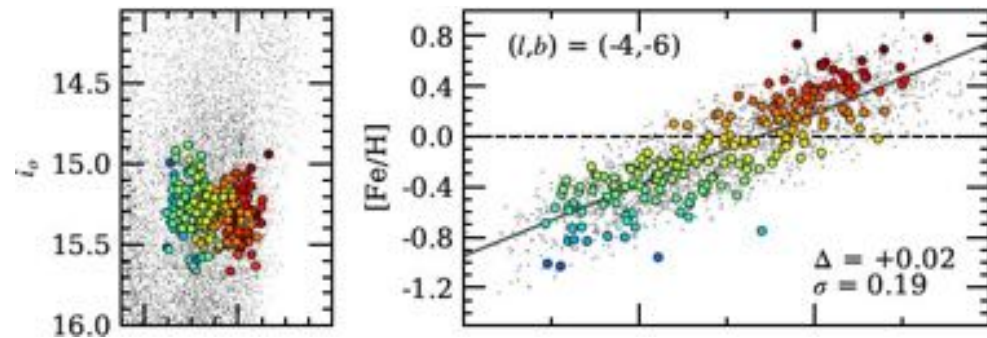
DP0 Delegate Profiles

Michael Rich UCLA

- Member, Stars, Milky Way, Local Volume, Galaxies Collaboration
- Co-chair crowded stellar fields working group
- Co-PI of the Blanco DECam Bulge Survey project
- Main interest is applying Rubin datasets to Milky Way, Magellanic Clouds
- LSST/Gaia cross-match

Calibrate
 $(u-i)_0$ to
[Fe/H] for red
clump stars

Bulge
metallicity
distribution



DP0 Delegate Profiles



Tansu Daylan

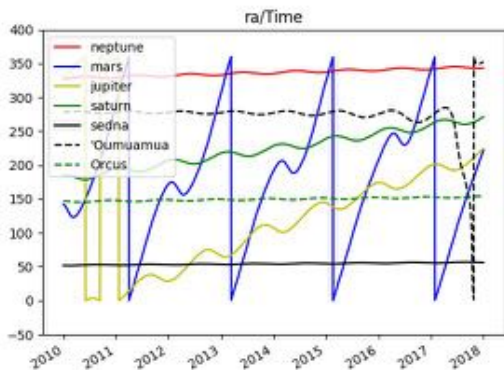
Massachusetts Institute of Technology & Princeton University
Postdoctoral Associate

Interested in the detection of slowly-moving, high-eccentricity interstellar objects with LSST (PI on Enabling Science Grant 2021-39, w/ Laura Inno and Antonio Vanzanella).

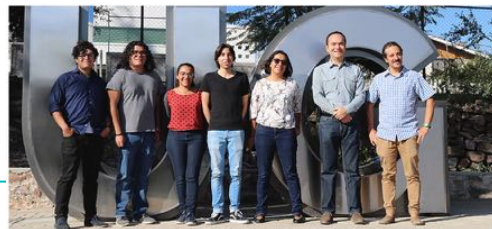
We will use DP0 to create a mock data set to train our detection algorithm on.

Happy to collaborate with anyone!

I'd like to understand our completeness and false alarm rate for slowly-moving objects as a function of eccentricity and distance from the Solar System.



DP0 Delegate Profiles



Alma (Xóchitl) González-Morales

Universidad de Guanajuato/CONACYT National Researcher
MEX-UNA in-kind contribution proposal co-lead
Contribution lead to SLSC-DESC

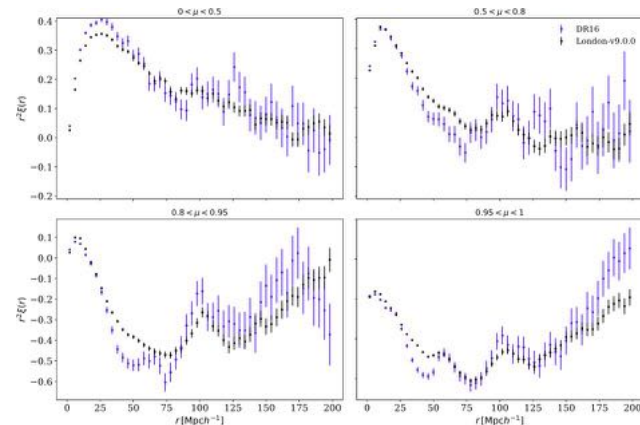
Main interests:

- Contribute to exploit Rubin to constrain Dark Matter.
- Rubin-DESI synergies.
- Joint constraints from different observables, and alternative to CDM models constraints, wave (axion like) dark matter in particular.
- Strong Lensing and DESC-DKM.
- EPO

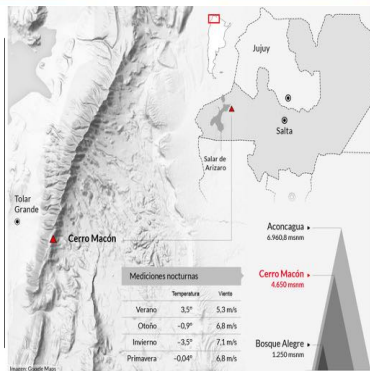
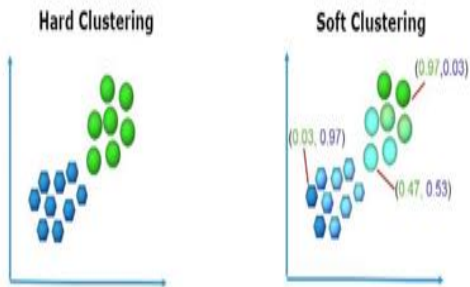
Interested in collaborating on any DP0 investigations? Count me in!

Things you want to learn : Everything there is to know to understand LSST data so that inference on DM properties is robust.

DESI Ly α -WG Year 1 Key Project co-convenor (outgoing WG co-chair)
Most recent work focused on simulated datasets on Ly α .



DP0 Delegate Profiles



Mariano Dominguez @ <http://iate.oac.uncor.edu/> Failed basketball star & SF writer

- Adjunct Professor [OAC-UNC](http://oac-unc.edu.ar/) and Independent Researcher [CONICET](http://conicet.gov.ar/)
- **Projects:** <https://cam.unc.edu.ar/> & <https://www.nodoaicba.org/>
- **Astrostatistics and Machine Learning for sustainable development**
- **Rubin Science Interests:** see also <https://orcid.org/0000-0002-7982-3135>
[Systems of Galaxies identification using zphot and WL mass maps.](#)

ICL and LSBGs detection & High magnification GL Fields

Satellites and Streams identification in LV

Satellites Constellations impact on LSST and astronomy

Sonification of LC and sound /images features representation in ML

Rare transients discovery using ML & LIGO GW sources counterparts

- Interested in collaborating on any DP0 investigations? **Absolutely**
- Things you want to learn: **Would like to know about the physics of the dark sector and AGI theory** Contact data: mariano.dominguez@unc.edu.ar
<https://twitter.com/marianojaviedr> <https://github.com/mardom>
<https://www.linkedin.com/in/mariano-javier-dominguez/>

[Nice video about Argentina](#)

DP0 Delegate Profiles

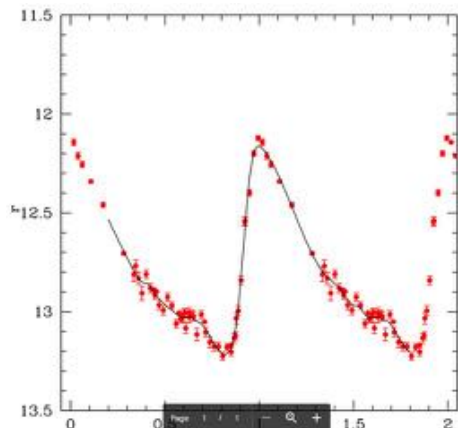


Massimo Dall'Ora

Istituto Nazionale di Astrofisica (INAF, Italy)

Staff Researcher, massimo.dallora@inaf.it

- SMWLV and TVS (and DESC) member
- Co-chair of the Crowded Stellar Fields Task Force (CSTF)
- co-PI of the Italian in-kind proposal → automated multi-band PSF precision photometry
- Main interest in the Rubin-LSST data is the structure and the distribution of the Galactic old stellar populations, using the RR Lyrae variables as tracers
- Main interest in DP0 is the structure of the Rubin-LSST data, to interface the catalogs with external analysis software (e.g. VaST)
- Other projects: MAORY@ELT Science Team Member, NASA DART Mission Observations WG



r-band light curve of a RR Lyrae star toward the GGC NGC 6569, DECam data, CSTF

DP0 Delegate Profile: Attila Bódi



Attila Bódi

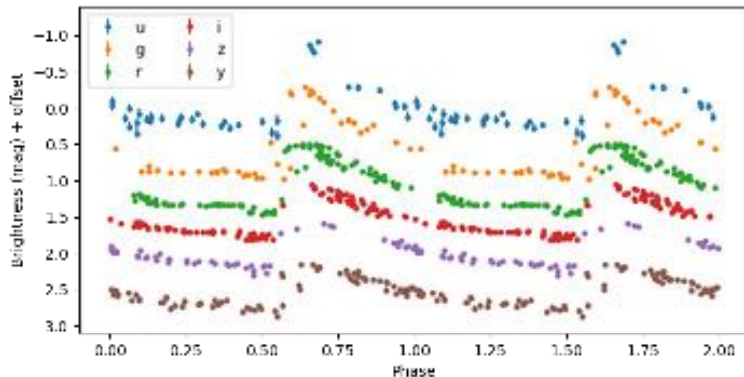


Róbert Szabó



Tamás Szklénár

CSFK Konkoly Observatory - HUN-KON in-kind contributors - members of the TVS group



RR Lyrae light curve extracted from DP0 dataset

- Name: Attila Bódi /bodi.attila@csfk.org/
- Affiliation: CSFK Konkoly Observatory, Hungary
- Position: research fellow

Interests and main work:

- Applying machine learning methods to astronomy
- Classification and characterization of pulsating and eclipsing variable stars
- Study of different stellar environments via classical pulsating variable stars

DP0 interests:

- How to work with LSST data
- Classification and identification of variable stars