Image Processing Tutorial is Cancelled Today

We will reschedule the tutorial for a future delegate assembly.

Delegate Profiles
If you prepared a delegate profile slide you could:
- present it now, or,
- present another day (we'll put the link to the Nov 5 slide deck in Zoom chat so you can move your slide)

Breakout Rooms (starting after Delegate Profiles)
- suggest/upvote a breakout topic (see table →)
  - unmute or use Zoom chat, let us know
- room 1: repeat of introductory tutorial (see below)

New-to-DP0 Delegates
- recorded introductory tutorial at ls.st/clo5689
- we will repeat live today for you, if wanted
- log into data.lsst.cloud, Notebook aspect
- navigate to `notebooks/tutorial-notebooks/`
- open `01_Intro_to_DP0_Notebooks.ipynb`

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

Room	Topic	Facilitator
main	General DP0 Q&A	Greg and Simon
1	Notebook 01: Intro to DP0, for any new-to-DP0 delegates who want this	Melissa
3	Supernova working group	
4	large scale structure working group	Louise
	??revisit one of the other tutorials??	
	??continued data viz techniques??	
	??general RSP Q&A??	
2	resolved stellar populations	Alex DW

Delegate Resources & Activities

Delegate Assemblies (dp0-1.lsst.io)
- **first hour**: presentations
  - help us to fill the upcoming assemblies
  - **suggest a topic you'd like to learn about**
  - **volunteer to present your DP0 work**
- **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)

2021-10-22	Image Processing	*Algorithms Q&A. DP0 science topics.*	Andrew Bradshaw (Rubin Camera Subsystem Team)
2021-11-05	Delegate presenters: Louise Edwards and Kristen Larson.	*delegate working groups*	*TBD*
2021-11-19	*delegate presenter(s)*	*delegate working groups*	*TBD*
2021-12-03	*delegate presenter(s)*	*delegate working groups*	*TBD*
2022-01-14	*delegate presenter(s)*	*delegate working groups*	*TBD*

Science Collaborations “DP0 New Friends”

DP0 “New Friends” Program (ls.st/clo5700):
The Science Collaborations (SCs) pair their long-term members with new-to-Rubin DP0 delegates to facilitate the participation of new-to-Rubin SC members.

CET Contact for “New Friends”: Jim Annis

The 8 LSST Science Collaborations:

- provide expert advice and analysis to Rubin
- fundraise for teams and projects
- implement research inclusion practices
- train, educate, & engage the scientific community
- collaborate on software development
- nurture a supportive environment
- are in the best position to do science with Rubin data

Transients and Variable Stars SC

Stars, Milky Way, & Local Volume

Strong Lensing SC

Active Galactic Nuclei SC

Solar System SC

Galaxies SC

Dark Energy SC

Informatics and Statistics SC

“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.

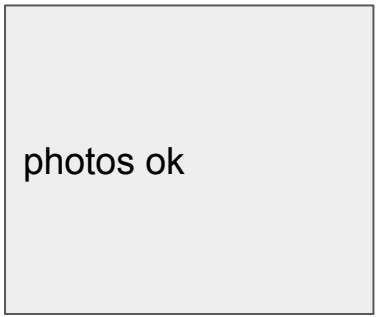
When: At the midpoint of DP0 Delegate Assemblies.

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, in our Data Preview 0 category, at any time!

Template DP0 Delegate Profile Slide



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:

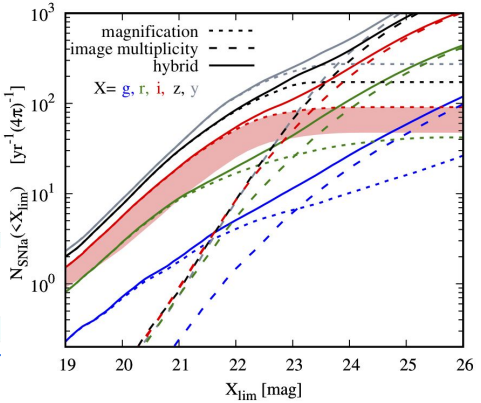
- Rubin Science Interests
- DP0-Specific Interest (if you've formed one yet)
- Interested in collaborating on any DP0 investigations?
- Things you want to learn

Delegate Profiles @ 9:05am

For our delegates who want or need to give their 30-second ‘delegate profile’ before the tutorial.

DP0 Delegate Profile: Radek Wojtak

- Name : Radek Wojtak (radek.wojtak@nbi.ku.dk)
- Affiliation : DARK, Niels Bohr Institute, University of Copenhagen
- Position : senior researcher
- Science Collaborations : TVS and DESC
- In -kind contribution co-lead: IDAC



The expected number of gl type Ia SNe (Wojtak et al. 2019)

DP0 goals

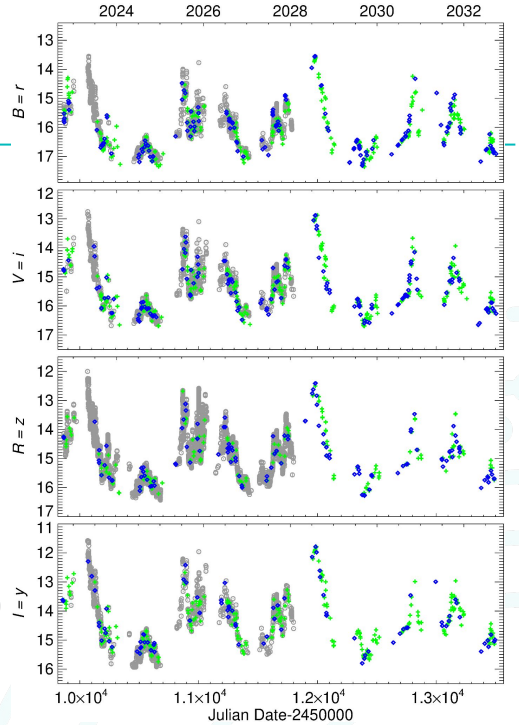
- Integrating pipelines for detecting glSNe (based on z_photo, SN-galaxy separation, … diff images) with the Platform
- Understanding the Rubin Platform in relation to the future IDAC in Dk
- Exploring science possibilities at the Rubin Platform

Science goals with Rubin-LSST

- Gravitationally lensed SNe: detection, cosmological constraints, predictions
- Cosmology with type Ia: standardisation, host galaxy dependance, peculiar velocities
- Cluster cosmology: cluster finders, optical mass proxies
- Multi-probe cosmological constraints

Claudia M. Raiteri

Staff astronomer @ INAF-Osservatorio Astrofisico di Torino, Italy
Officer of the Whole Earth Blazar Telescope (**WEBT**)
Member of the **Gaia** Data Processing and Analysis Consortium (DPAC)
MAGIC Associate Scientist
Member of the **TVS** and **AGN** Rubin Science Collaborations



Rubin DP0 collaborators:
Maribel Carnerero and **Filippo D'Ammando**
Members of Rubin SCs and DP0 delegates

DP0 interests:
-learn how the Rubin Science Platform works
-no specific DP0 project yet
-willing to collaborate!

Rubin science interests:
AGN and in particular **blazar variability** (multiwavelength and multimessenger),
Blazar **census** and **environment**
Involved in LSST cadence optimization

From Raiteri, Carnerero, Balmaverde, Bellm, Clarkson, D'Ammando, Paolillo, Richards, Villata, Yoachim, Yoon 2021, "Blazar variability with the Vera C. Rubin Legacy Survey of Space and Time (LSST)", submitted to the ApJS Focus issue on Rubin cadence

Delegate Profiles @ 10:00 am

Most delegates will give their 30-second ‘delegate profile’ after the tutorial and before the breakout sessions.

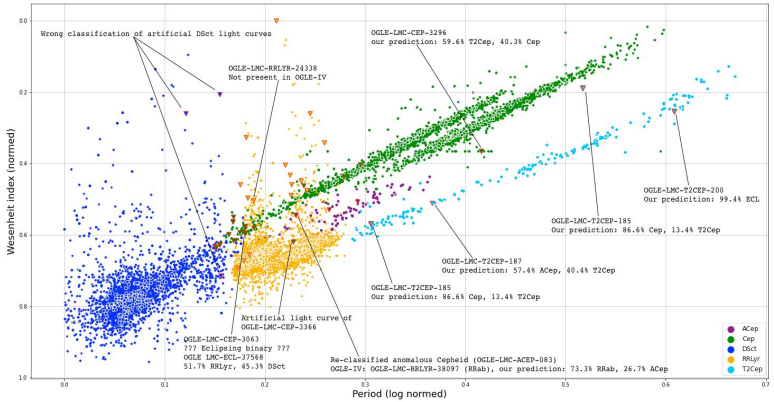
DP0 Delegate Profile: Tamás Szklenár


Tamás Szklenár


Róbert Szabó


Attila Bódi

CSFK Konkoly Observatory - delegates and members of the TVS group



- Name: Tamás Szklenár /szklenar.tamas@csfk.org/
- Affiliation: CSFK Konkoly Observatory, Hungary
- Position: research assistant

Interests and main work:

- Machine learning methods
  - Classification of Variable stars
  - Identification of Young Stellar Objects
- Binary stars and clusters

DP0 interests:

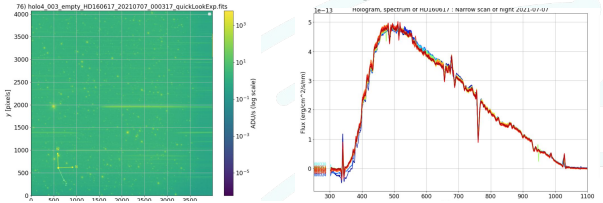
- How to work with LSST data
- Classification and identification of variable stars
- Cluster structure and binary star systems

Template DP0 Delegate Profile Slide

- Name : Sylvie Dagoret-Campagne (dagoret@lal.in2p3.fr)
- Affiliation : IJCLab/IN2P3/CNRS (France) - DESC member
- Career Level : Research staff

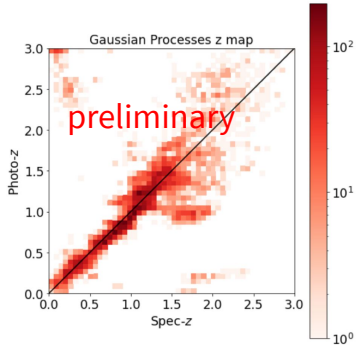
1) **Main work** : Photometric corrections (DESC) - Atmospheric monitoring @ Rubin auxiliary Telescope

Auxtel obs in 2021



Auxtel spectroscopic image 2021 and CALSPEC star spectra

2) Second interest : Photometric Redshifts (DESC)



- Try gaussian Processes methods
-Need to optimize hyperparameters

PhotoZ vs true Z in DC2 (to be improved)

My Goal in DP0 : work in Large Scale Structure team:

- Beginner in the field (cannot lead a group)
- Try standards methods on sim data : 2-pts functions, Fourier transform, or something else (I am not aware)

Sahar Allam (She/Her) FNAL sallam@fnal.gov

Who am I?

- Research Staff Astronomer/Scientist
- Builder in the Dark Energy Survey, Member in many DES projects
- Most active in the Calibration, Data Release, Gravitational wave, Gravitational lensing, Galaxy interaction, Galaxies environment and the effect of the environment on galaxies properties.

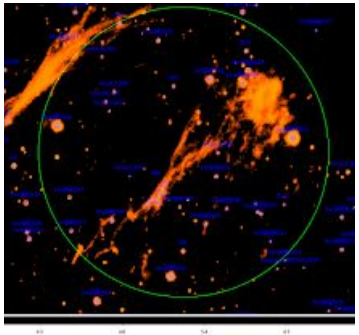
Science goals with Rubin-LSST

- Member in the Dark Energy Science collaboration, Stack Club, Gravitational Lensing Working group, Gravitational Waves, Calibration Working Group.
- A member in the NCSA/FNAL/LSST efforts,
- PI on LOI (Community Engagement with Rubin Observatory Commissioning Effort - Letter of Interest).

DP0 goals

- Explore science possibilities with the Rubin Platform,
- Continue working with Prof. M. Wiesner on his project LSST-DESC#211,
- Learn how to retrieve image cutout of objects,
- Collaborate with other DP0 investigators.

DP0 Delegate Profile Slide: **Innocenza Busa**



Affiliation and Position: INAF - Astrophysical Observatory of Catania, Italy - Staff Researcher
Science Collaborations : Galaxies and SMWLV
Involved people: Prof. F. Leone (and Catania optical group), Prof. C. Trigilio (and Catania radio group);
S. Cabibbo working on a Master degree thesis.

- **Rubin Science Interests:**
  LSB galactic extended sources: identification, classification and variability ;
  CRs accelerators; Radio synergies

- **DP0-Specific Interest:**
  1. Learning how to work with LSST data
  2. Testing detection and variability measurements of diffuse extended regions;
  3. Obtaining mCP, Flare and LBV stars light curves to test classification methods

- **Interested in collaborating on any DP0 investigations?**
  Yes!

- **Things to learn:** Reduction pipelines, difference images analysis, obtaining light curves, catalogues cross-matching

DP0 Delegate Profile: Christa Gall

Name: Christa Gall (christa.gall@nbi.ku.dk)
Affiliation: DARK, Niels Bohr Institute, University of Copenhagen
Position: Associate professor
Science Collaborations: DESC, TVS

Danish In-kind contribution lead to build a Lite IDAC

DP0 interests:

- Understanding technical and practical aspects, features and usability of the Rubin Science Platform
- Explore and learn how to extract, query, display, use DP0 data
- Examples: Detection and classification of transients, retrieving SN light curves, testing ML algorithms for photo-zs

Science interests with Rubin-LSST:

- Transients: Detection, identification, classification of hitherto unknown transients, rates of different types of transients
- Formation and evolution of dust in galaxies, in and around different types of transients
- SN Type Ia and cosmology challenges: extinction, standardisation, progenitors
- Developing and testing ML algorithms
- Automated real time follow-up of transients

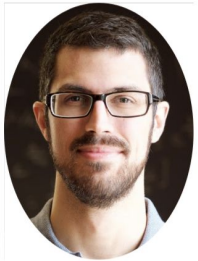
Troy Raen

troy.raen@pitt.edu

Michael Wood-Vasey
Pitt. PI

Ross Thomson
Google

Troy Raen
Pitt



Daniel Perrefort
Pitt

Christine Mazzola Daher
Pitt

Pitt-Google Alert Broker

University of Pittsburgh. Graduate Student.
entering the job market

Pitt-Google Alert Broker
Lead developer
github.com/mwvgroup/Pitt-Google-Broker

TOM Toolkit integration, proof-of-concept:
github.com/mwvgroup/tom_pittgoogle

Interests:
- Transients. Population statistics. Cataclysmic variable stars.
- Multi-messenger astronomy.
- Software pipelines. User tools. Live data streams.

DP0 Interests:
- Learning about the system: TAP, science pipelines, etc.