

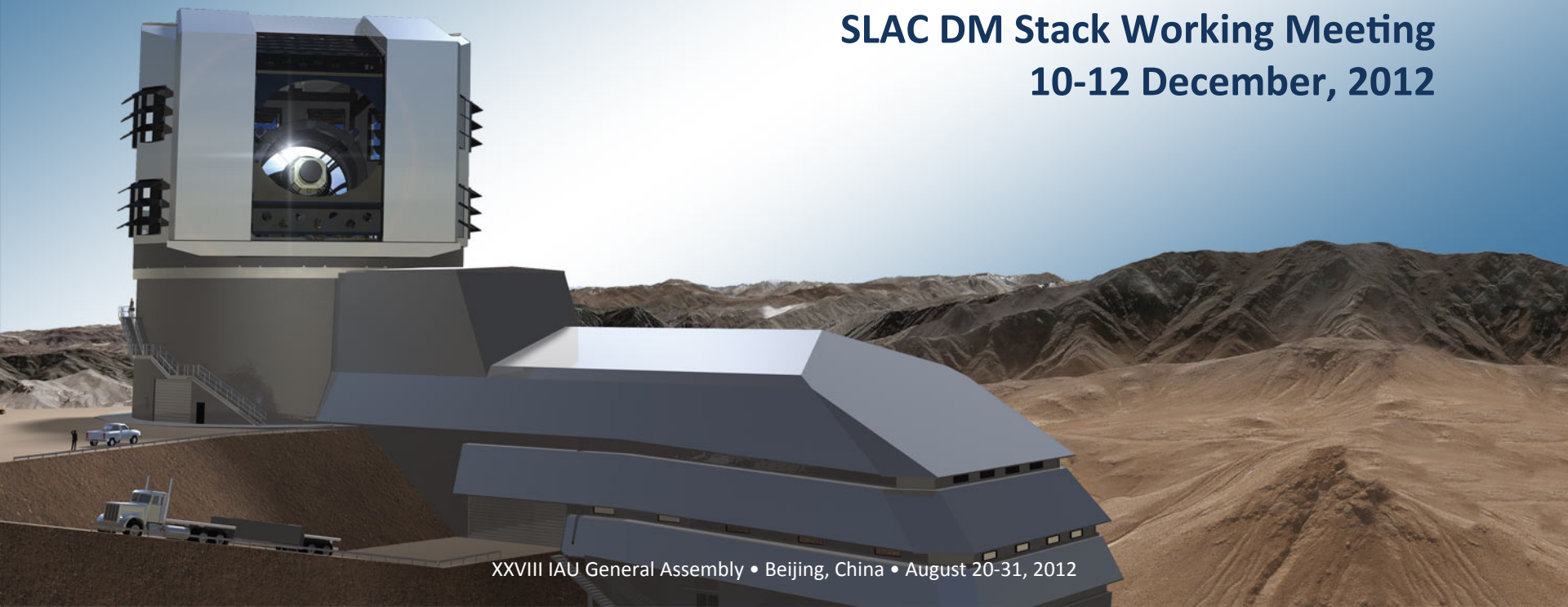


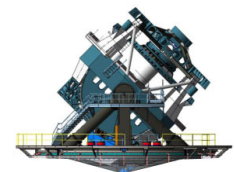
Data Management Stack Tutorial

Mario Jurić

LSST Data Management Project Scientist

SLAC DM Stack Working Meeting
10-12 December, 2012

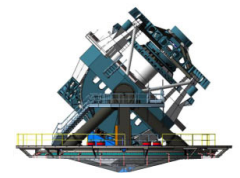




The Plan and the Goals for the Workshop

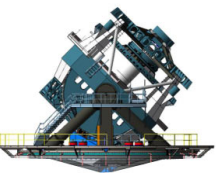


- Plan: Understand the Camera team needs. Provide an overview of Data Management, DM software components, tools, and processes. Teach how to use them in the context of Camera's needs.
- Goals: By Wednesday afternoon, we hope to achieve a common understanding of:
 - The components present in DM stack, and their level of maturity
 - Which of those components are relevant for Camera's work
 - How to begin using those components
 - Who to talk to in DM to facilitate that usage
 - A first outline of a plan for writing Sensor I&T pipelines with DM components
 - A plan on how to continue two-way communication and collaboration on software issues



Robert Lupton (Princeton)

- Astronomical algorithms guru
- Image processing codes for SDSS, ACT, HSC-Survey, ...
- **LSST DM Applications Lead**
- Designed/wrote most of the Applications Framework (afw) and Measurement Algorithms (meas_algorithm) code
- Also (co-)wrote EUPS, SuperMongo, ...
- rhl@astro.princeton.edu

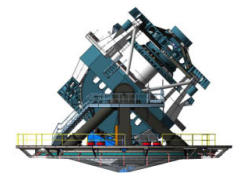


People (2/4)



Kian-Tat Lim (SLAC)

- **DM Middleware Lead and Software Architect**
 - Designed/wrote a large fraction of LSST DM middleware, including the Data Butler
- ktl@slac.stanford.edu



People (3/4)



Gregory Dubois-Felsmann (SLAC)
<gpdf@slac.stanford.edu>

**DM Interface Scientist and
System Architect**

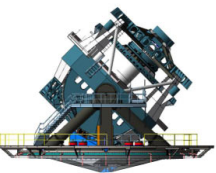
Responsible for communication
with other subsystems



Jacek Becla (SLAC)
<becla@slac.stanford.edu>

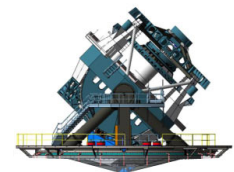
DM Database Lead

Leading the group developing the
multi-PB distributed database for
LSST catalogs.



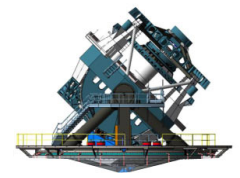
Mario Juric (LSST)

- **LSST DM Project Scientist**
- DM's analog of some linear combination of Steve Kahn and Andy Rasmussen
- DM stack's BDFTDOE
 - "Benevolent Dictator for the Duration of Employment"
- mjuric@lsst.org



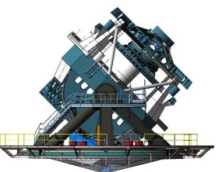
- **Day #1 (9am-12noon):**
 - Introductions and Goals (this talk)
 - DECam CCD test analysis code (Donna)
 - DM Stack Overview (Mario)
 - Application Framework Classes (Robert)
 - Measurement Algorithms Classes (Robert)

- **Day #1 (2pm-5pm):**
 - Tutorial/walk-through: Fe55 processing example - Robert/Mario/KTL
 - Cross-talk measurement example - Robert/Mario/KTL
 - Design discussion for converting DECam scripts - All



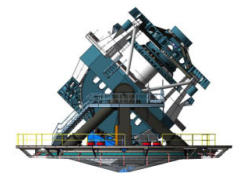
- **Day #2: Morning, 9am-12pm**
 - DM Data Butler: Dataset organization/persistence layer - KTL
 - DM pipe_tasks: Task framework - KTL
 - Design discussion continued - All
 - DECam app conversion – All

- **Day #2: Afternoon, 1-5pm**
 - DECam app conversion (cont'd) - All
 - Plans for future development and Camera-DM communication (Gregory et al.).



Day #3 (Wednesday)

- **Morning:**
 - Continued app development and design discussion
- **Afternoon (1-3pm):**
 - Continued app development and design discussion
 - Final notes
- Note: RHL & MJ leave for SFO around ~3pm.



- We hope this tutorial will be audience driven. Consider the slides as conversation starters; feel free to ask questions at any time.
- We ~~may~~ will change the agenda depending on feedback. It's important we cover areas you feel are critical.
- This is the first time we do this! Expect the unexpected 😊.