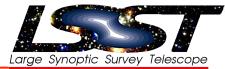
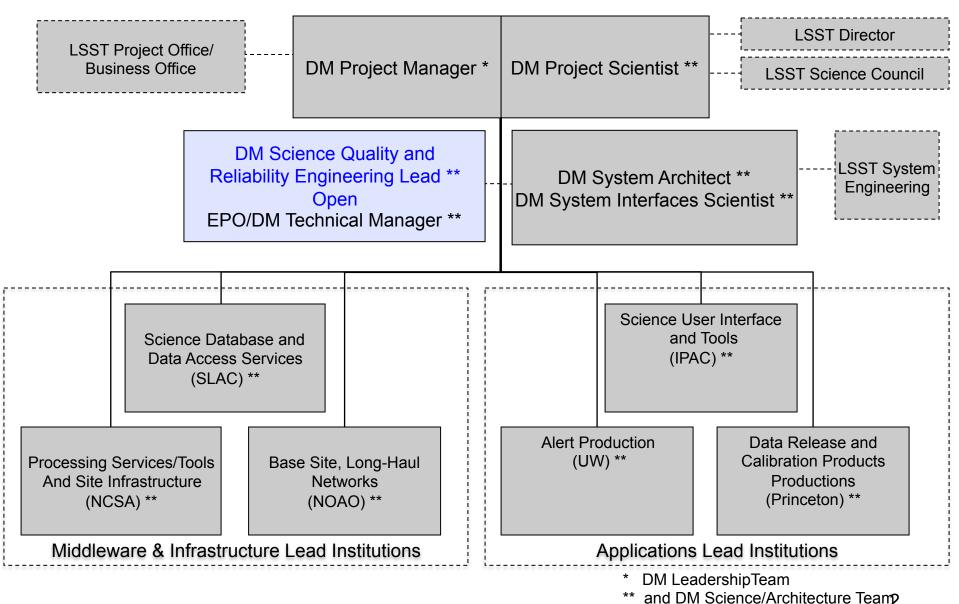


### LSST Data Management Organization and Staffing Construction and Commissioning Phases

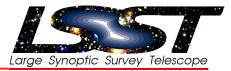
Jeff Kantor LSST DM Project Manager

#### Construction/Commissioning Phases Organization



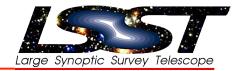


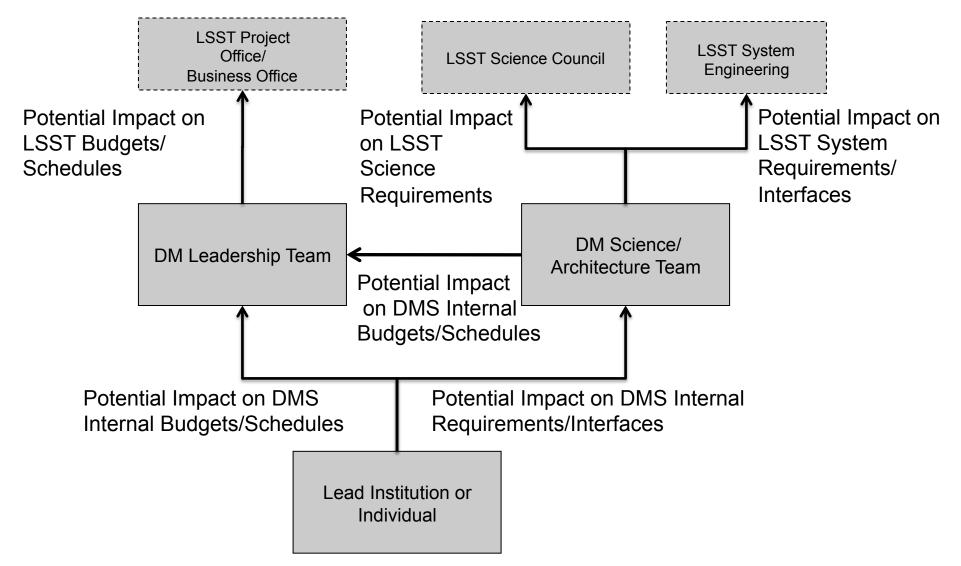
# Cross-organizational control bodies



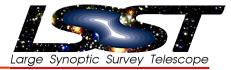
- Control bodies provide integration of management, resources, plans, process, architecture, and interfaces across entire DM team
  - DM Leadership Team (LT)
  - Science/Architecture Team (SAT)
    - Working Groups (WG)
      - Applications, Middleware, Infrastructure, Database, Operations
  - Technical Control Team (combination of LT and SAT)
- All DM partners are fully represented and co-equal
  - DM leadership chair the bodies
  - Lead institutions are members
- SAT meets at least monthly, LT and WGs weekly
- All meet in person at least twice a year

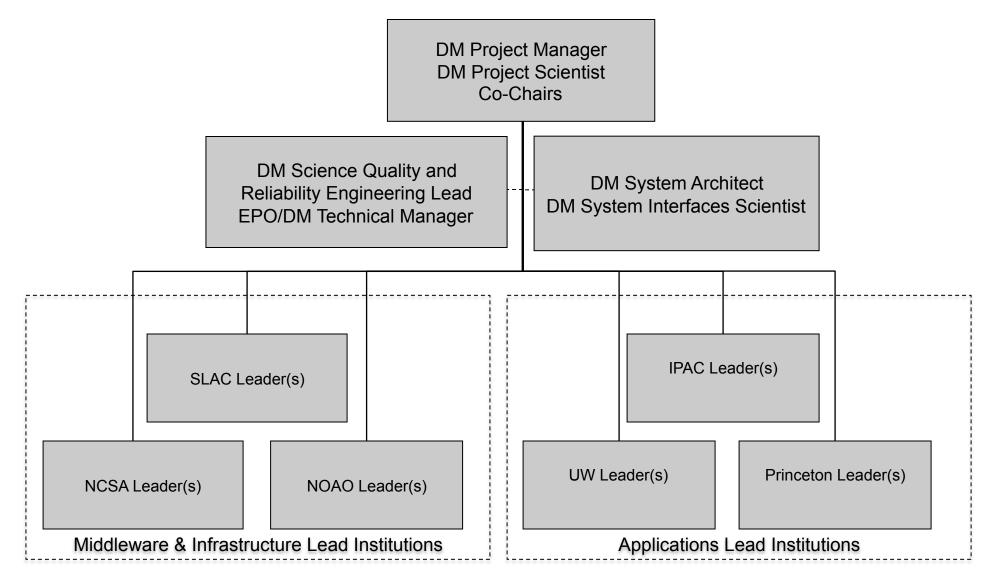
# Problem Management/Escalation

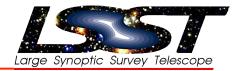




# DM Leadership Team (LT)

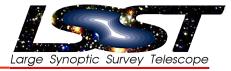


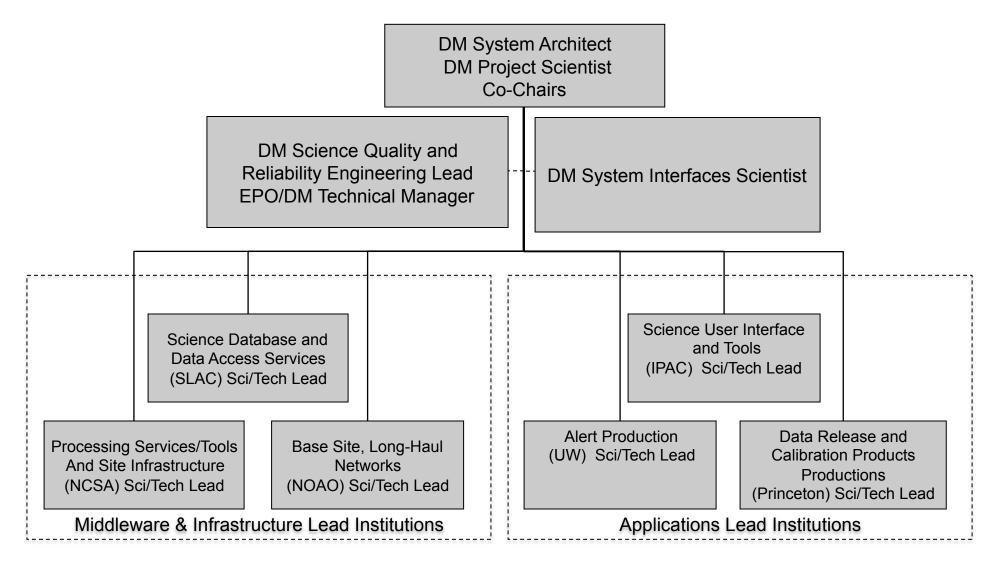


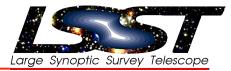


- Charter/purpose
  - Establish scope of work and resource allocation across DM
  - Ensure overall project management integrity across DM
  - Ensure Earned Value management requirements are met
- Co-Chaired by the DM Project Manager, DM Project Scientist
- Core members are Lead Institution Project Managers, Scientific/ Technical Leads, DM SQuaRE Leads, DM System Architect, DM System Interfaces Scientist
- Prepares all budgets, schedules, plans
- Meets every week to track progress, address issues/risks, adjust work assignments and schedules, and disseminate/discuss general PM communications
- Creates and publishes monthly, quarterly, annual progress reports
- Meets at start of each software development phase with SAT to establish detailed scope/work plan
- Meets with SAT for change control (TCT)

DM Science/Architecture Team (SAT)

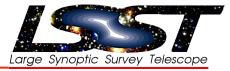






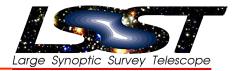
#### • Charter/purpose

- Support DM System Architect in ensuring that the DMS meets science requirements
- Support DM Project Scientist in ensuring DMS has overall scientific integrity
- Control all DMS internal and external interfaces
- Charter/perform due diligence for proposed technical baseline changes
- Co-Chaired by the DM System Architect, DM Project Scientist
- Core Members are Institutional Scientific/Technical Leads, DM SQuaRE leads and DM System Interfaces Scientist
- Conducts design reviews of all DM System elements
- Meets at start of each software development phase with LT to establish detailed scope/work plan
- Meets with LT for change control (TCT)
- SAT commissions Working Groups
  - Working groups are architectural (e.g. Applications, Middleware, Database, Infrastructure, Operations), span subsystems
  - Chaired by a member of the System Architecture Team
  - Members include other technical personnel, possibly including outside collaborators



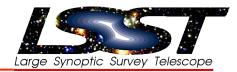
- Charter/purpose
  - Ensure that all deliverables are baselined and once baselined only changed when necessary, according to LSST and DM configuration control processes
- Same membership as LT plus SAT, convened for specific purpose of change control
- Chaired by the DM QA Integration and Test Lead
- Verifies that specifications and deliverables are of sufficient maturity and quality, and of acceptable impact to cost and schedule, to be baselined (placed under configuration controlled status)
- Reviews and recommends approval/rejection of proposed changes to baselined items to DM Project Manager, DM Project Scientist
- Meets at least monthly and more often during periods prior to major reviews and data releases or when there exist urgent requests for approval to change baseline

## DM Project Manager



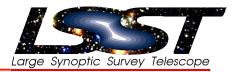
- Manages the overall DM System
- Defines scope and funding for DM System
- Develops and implements the DM project management and control process, including earned value management
- Approves the DM WBS, budgets and resource estimates
- Participates in identification of new DM partners
- Approves or executes all DM contracts
- Convenes and/or participates in all DM reviews
- Co-Chairs DM Leadership Team
- Member of LSST Project Office
- Reports to LSST Project Manager

# DM Project Scientist



- Responsible for the science deliverables of the DM System
- Sets requirements for the DMS that:
  - Ensure that the design and operational flow of the data products meet the needs of the science community
  - Ensure that the quality requirements of the data products will be / are being met by the DMS, with a particular emphasis on choice of appropriate application algorithms
- Sets requirements for and assess/validates results of Data Challenges and other precursor experiments
- Sets requirements and assesses/validates results of for Data Releases
- Convenes and/or participates in all DM reviews
- Co-chairs DM Leadership Team, Science/Architecture Team
- Member of LSST Science Council
- Reports to LSST Director

# DM System Architect



- Responsible for the overall design integrity of the DMS as a system, including
  - Internal and external interfaces and overall architecture
  - Use of frameworks and off-the-shelf components
  - Sound engineering practice
- Ensures that the DMS design is traceable to and meets the requirements set by the DM Project Scientist, through requirements/design models and technical reviews
- Sets standards for development, implementation, and documentation of the DMS, and ensures that they are being met by all DM participants
- Participates in stakeholder and end user coordination and approval processes and reviews
- Member of the LSST System Engineering Team
- Co-Chairs the DM Science/Architecture Team
- Reports to the DM Project Manager and DM Project Scientist