

## The LSST Data Challenges

T. Axelrod (Steward/LSSTC), R. Allsman (LSSTC), A. Becker (UW), J. Becla (SLAC), D. Burke (SLAC), A. Connolly (UW), C. Cribbs (NCSA), G. Daves (NCSA), D. Dossa (LLNL), D. Gehrig (NCSA), Z. Ivezic (UW), A. Jagatheesan (SDSC), J. Kantor (LSSTC), D. Levine (IPAC), K-T. Lim (SLAC), R. Lupton (Princeton), S. Monkewitz (IPAC), J. Myers (U. Arizona), R. Owen (UW), F. Pierfederici (LSSTC), S. Pietrowicz (NCSA), M. Nieto-Santisteban (JHU), R. Plante (NCSA), N. Silvestri (UW), C. Smith (NOAO), A. Thakar (JHU), J.A. Tyson (UCD), D. Wittman (UCD)

The development of the LSST Data Management System (DMS) includes a series of four Data Challenges that take place during the Design and Development phase of the project. The Data Challenges are partial prototypes of the full DMS, each validating different aspects of the system. DC1, which was executed in 2006, emphasized scalability of the overall processing and data flows. DC2, which was executed in 2007, prototyped the nightly processing pipelines and the middleware that supports them. DC3, planned for execution in 2008, will prototype the data release pipelines. DC4, the final Data Challenge before construction begins, will focus on data access by the astronomical community and the data processing that supports scientific use of the LSST data.

