Citations for LSST papers

The LSST Project Science Team

July 17, 2015

Abstract

This document provides information about science and technology papers that describe LSST infrastructure. These papers should be referenced when describing the LSST system and its anticipated science outcome. Doing so will refer the readers to the most relevant publications and also recognize the contributions of those who brought the Project to fruition.

Contents

1 LSST Project Publication Policy

The LSST Project Publication Policy can be obtained from the LSST website. The remainder of this document lists suggested papers to reference, organized by topics.

Files needed to make this file are available from:
https://github.com/lsst-pst/LSSTreferences

2 LSST System and Science

The LSST system (brief overview of telescope, camera and data management subsystems), science drivers and science forecasts are described in:

- LSST Science Requirements Document: Ivezić and LSST Science Collaboration 2013
- LSST overview paper: Ivezić et al. 2008
- LSST Science Book: Abell et al. 2009

3 Simulations

- Simulations framework and catalog simulations (CatSim): Connolly et al. 2014
- Operations Simulator (OpSim): Delgado et al. 2014
- Metrics Analysis Framework (MAF): Jones et al. 2014
- Image simulations (Phosim): Peterson et al. 2015

4 Data Management

LSST data management and data products are described in:

- Data Products Definition Document: Jurić et al. 2013
- Data Management System Design: Kantor et al. 2013

5 Camera

- Design and development of the LSST camera: Kahn et al. 2010

6 Telescope and Site

- Telescope and site overview and status in 2014: Gressler et al. 2014

7 System Engineering

- LSST systems engineering: Claver et al. 2014
- System verification and validation: Selvy, Claver, and Angeli 2014

References

Abell, P. A. et al. (2009). "LSST Science Book, Version 2.0". In: arXiv:0912.0201.

Claver, C. F. et al. (2014). "Systems engineering in the Large Synoptic Survey Telescope project: an application of model based systems engineering". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9150, DOI: 10.1117/12.2056781.

Connolly, A. J. et al. (2014). "An end-to-end simulation framework for the Large Synoptic Survey Telescope". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9150, p. 14. DOI: 10.1117/12.2054953.

Delgado, F. et al. (2014). "The LSST operations simulator". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9150, p. 15. DOI: 10.1117/12.2056898.

Gressler, W. et al. (July 2014). "LSST Telescope and site status". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9145, p. 1. DOI: 10.1117/12.2056711.

Ivezić, Ž. and the LSST Science Collaboration (2013). *LSST Science Requirements Document*. URL: http://ls.st/LPM-17.

Ivezić, Ž. et al. (2008). "LSST: from science drivers to reference design and anticipated data products". In: arXiv:0805.2366v4.

Jones, R. L. et al. (2014). "The LSST metrics analysis framework (MAF)". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9149, DOI: 10.1117/12.2056835.

Jurić, M. et al. (2013). *LSST Data Products Definition Document*. URL: http://ls.st/LSE-163.

Kahn, S. M. et al. (2010). "Design and development of the 3.2 gigapixel camera for the Large Synoptic Survey Telescope". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 7735, DOI: 10.1117/12.857920.

Kantor, J. et al. (2013). *LSST Data Management System Design*. URL: http://ls.st/LDM-148.

Peterson, J. R. et al. (2015). "Simulation of Astronomical Images from Optical Survey Telescopes Using a Comprehensive Photon Monte Carlo Approach". In: *The Astrophysical Journal Supplement Series* 218.1, p. 14. arXiv:1504.06570 [astro-ph.IM]. URL: http://stacks.iop.org/0067-0049/218/i=1/a=14.

Selvy, B. M., C. Claver, and G. Angeli (2014). "Using SysML for verification and validation planning on the Large Synoptic Survey Telescope (LSST)". In: *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*. Vol. 9150, DOI: 10.1117/12.2056773.