Abstract Submitted for the APR18 Meeting of The American Physical Society

Status of the LISA Data Challenges JOHN BAKER, NASA/GSFC, LISA DATA CHALLENGE WORKING GROUP TEAM — Following the restart of the Laser Interferometer Space Antenna (LISA) mission project by the European Space Agency last year there is new urgency to establish a solid foundation for LISA science analysis. This has motivated a new community effort to conduct a series of LISA Data Challenges. Anticipated sources include massive black hole mergers, stellar origin black holes, extreme mass ratio inspirals, stochastic backgrounds and millions of galactic binaries all superposed in the LISA data stream. The LDC effort will tackle a series of increasingly rigorous challenges aimed to develop source models, data analysis algorithms and software resources needed to demonstrate readiness and to realize LISA's science objectives in support of mission formulation studies already underway. The first data sets, beginning with elementary source examples, are now available. Future challenges will add rigor, incorporating, for example, realistic data features including gaps and glitches, etc. Researchers are invited to join us in demonstrating techniques for characterizing the first round events and in the challenges to come.

> John Baker NASA/GSFC

Date submitted: 12 Jan 2018

Electronic form version 1.4