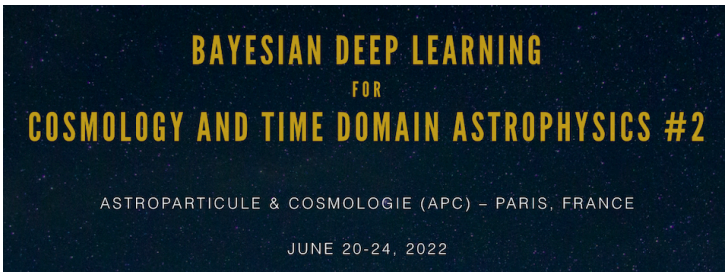

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The Extended LSST Astronomical Time Series Classification Challenge (ELAsTiCC)

The original Photometric LSST Astronomical Time-Series Classification Challenge (PLAsTiCC) established the gold-standard reference dataset of Rubin light curves and catalyzed the development of several deep learning algorithms for classification. However, to truly simulate LSST operations, we must simulate not light curves, *but real-time alert streams, complete with the contextual information an astrophysicist would receive from Rubin.* This dataset will allow the Rubin ML community to prepare for the start of commissioning, as well as provide a new reference sample for cosmological investigations with LSST. The key goal of ELAsTiCC to prepare LSST's Science Collaborations working in the time-domain for Rubin Operations. In creating this successor to PLAsTiCC, we have incorporated deep-learning in generating the simulations, and we expect the simulations to become the basis for many novel ML methods that encode both light curves and contextual information into a complex feature space. I will discuss the ELAsTiCC team's work in building this dataset, and progress towards launching the challenge, and discuss several of the studies that we have envisioned for this dataset.

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