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The Photometric LSST Astronomical Time Series Challenge (PLAsTiCC)

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The Photometric LSST Astronomical Time Series Classification Challenge (PLAsTiCC) was an open data challenge to classify simulated astronomical time-series data in preparation for observations from the Large Synoptic Survey Telescope (LSST), which will achieve first light in 2019 and commence its 10-year main survey in 2022. LSST will revolutionize our understanding of the changing sky, discovering and measuring millions of time-varying objects. In this challenge, we posed the question: how well can we classify objects in the sky that vary in brightness from simulated LSST time-series data, with all its challenges of non-representativity? I will describe the PLAsTiCC challenge from conception, validation to delivery and highlight the results of the challenge, and discuss how this rich and complex simulation can be used to better understand the transient sky.

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