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STARRY: Light curve modeling suite

Thursday, October 25, 2018 11:15 AM (15 minutes)

I will discuss the ongoing development of the open-source STARRY code for computation of fast light curves for stellar and exoplanet science. I will focus mainly on computational aspects, including (1) obtaining model derivatives via autodifferentiation for use in gradient-based inference schemes such as Hamiltonian Monte Carlo, (2) developing simultaneous C++, Julia, and Python interfaces to the code, and (3) fully integrating code development with paper writing using SymPy, IPython Notebooks, and Continuous Integration (CI) tools.

Presenter: LUGER, Rodrigo

Session Classification: Lightning Talks