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Computational Tools for Exploring Cosmology KEENAN STONE, JACOB MOLDENHAUER, LARRY ENGELHARDT, EZEKIEL SHULER, Francis Marion University — We describe a set of interactive simulations built for fitting cosmological models to experimental data sets. Current versions allow users to generate personalized dark energy based models (e.g. LCDM) while providing means of both visual and numerical comparison to observational results from various surveys. Additionally, we present progress towards the development of new programs that enable testing of a more general spectrum of models. These will feature minimization routines and improved interface to complement existing functionality, with aspiration that they may be found useful to researchers and educators alike.

Keenan Stone Francis Marion University

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