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Replicating Stellar Transit Phenomena DOROTHY DICKSON-VANDERVELDE, RYAN BROWN, JEANNETTE MYERS, Francis Marion University — Exoplanet discovery by the method of observing transit events is one primary method used by astronomers today. The challenge of explaining the phenomena to young people by means of a physical system that can be modified by the user was the goal of this project. An Orrery was constructed using only materials readily available. Variations in planet size, light source, and observing annulus size were explored and transit light curves were obtained. Results of stability analysis and comparison to stellar transit data are presented. This work was supported by NASA Grant NNX13AD05G.

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