1077-O1-599   **Rodney X. Sturdivant*** (`Rodney.Sturdivant@usma.edu`). *Euler Games for Differential Equations.*

Euler's Method is a commonly used numerical method used to introduce students to solutions when first learning differential equations. In practice, it quickly becomes a series of computations contributing littel to conceptual understanding. The "human object lessons" in this presentation move the numerical method off of the paper and out of the computer into the classroom and beyond. Students become an active player in the algorithm as, for example, they use a differential equation "compass" and navigate to win prizes in exercises such as "Uncle Euler's Egg Hunt". Several exercises are presented that have been extremely successful in both engaging students and exciting them about the mathematics they are learning. (Received September 08, 2011)