

1114-34-231

**Ron Buckmire\*** (buckmire@oxy.edu), Fowler Hall, Room 313, Department of Mathematics, Occidental College, Los Angeles, CA 90041, and **Jacob Ortega-Gingrich**. *Cinematic Box-Office Dynamics : An Overview Of A Particular Application of Ordinary Differential Equations to the Time Evolution of Theatrical Film Grosses*.

Cinematic Box-Office Dynamics is the name given to the study of the way in which theatrically released films earn money over time. This phenomenon is an active area of research in economics and mathematics. We will present an overview of several problems involved in creating effective mathematical descriptions of the evolution over time of a film's earning potential at the box-office. We will also discuss some attempts at developing and testing mathematical models involving ordinary differential equations that can simulate or approximate the box-office dynamics of certain classes of films. (Received August 28, 2015)