CCSU DEPARTMENT OF MATHEMATICAL SCIENCES

COLLOQUIUM

Friday, November 1 3:00 – 4:00 PM Maria Sanford, Room 101

PULL-BACK CARS: PLAYING AT THE INTERSECTION OF DIFFERENTIAL EQUATIONS AND MATHEMATICAL MODELING

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and

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<u>Abstract:</u> The focus of this talk is a mathematical modeling problem concerned with the motion of toy pull-back cars. Using real data, it will be shown that the motion of pull-back cars can be modeled reasonably well with standard tools from calculus and differential equations. A secondary goal of the talk is to promote the inclusion of modeling projects early in the undergraduate mathematics curriculum, in order to develop research skills and experience with open-ended problems.