JOINT EVENT

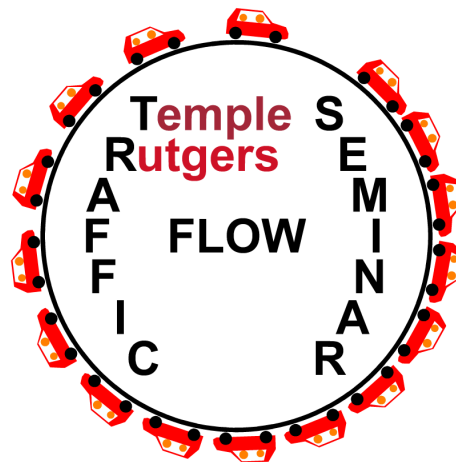**TEMPLE UNIVERSITY**
Department of Mathematics

Applied Mathematics and Scientific Computing Seminar

Room 617 Wachman Hall, Temple University

Wednesday, 3 February 2016, 4:00–5:00 p.m.

Coupled PDE-ODE Models: Applications to Traffic Flow

by Maria Laura Delle Monache
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Abstract.   In this talk, we present two PDE–ODE coupled models that can be used to describe different traffic situations. First, we consider a model that applies to moving bottlenecks and then we consider a model that applies in control problems for highway ramp metering. We provide a rigorous analytical framework for Cauchy and Riemann problems and then describe different numerical methods and show some numerical results.