

# Applied Math Seminar

United States Naval Academy

Thursday April 16, 2015

12 noon, Room CH 351



Spring 2015

## Speaker

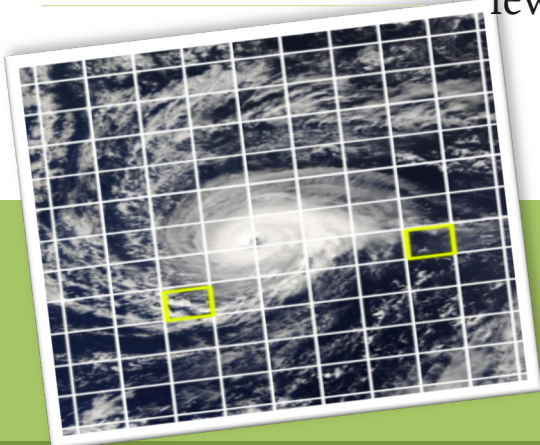
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## Phase transition in atmospheric dynamics

We discuss a modification of the classical Primitive Equations of the atmosphere with the purpose of introducing phase-change effects caused by the evaporation of water in the air. From the mathematical viewpoint, the model requires a weak formulation which involves variational inequalities to treat discontinuities and set-valued maps appearing in the model. The analysis presents significant differences with respect to the classical models and captures a few features of physical interest.



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