1077-35-1630 **Lorena Bociu** (lvbociu@ncsu.edu), NC , and **Daniel Toundykov*** (dtoundykov2@unl.edu), NE. *Attractor for a non-dissipative von Karman plate with damping in free boundary conditions.*

I will discuss a plate equation suggested by a certain flow-structure interaction model: a von Karman plate with a first-order non-dissipative term in the interior, and subject to boundary damping acting through free boundary conditions. The resulting dynamical system does not possess a strict Lyapunov function on the "natural" energy space; as a result the boundedness of the energy, let alone existence of an absorbing ball, is a priori unknown. It will be shown that despite the lack of monotonicity and absence of interior dissipation this nonlinear flow may converge to a global compact attractor. (Received September 20, 2011)