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Juraj Foldes* (foldes@virginia.edu), **Armen Shirikyan** and **Mouhamadou Sy**. *Uniqueness of invariant measures for boundary forced Boussinesq system.*

In this talk we investigate properties of invariant measures for the Boussinesq equations in the presence of a degenerate random forcing acting only in the temperature component and only through the boundary. The main goal is to prove the existence of a unique invariant measure in essentially elliptic setting, that is, when sufficiently many directions are forced. The approach is based on a boundary controllability of the Boussinesq system, variational methods, and improved Carleman estimates. (Received September 06, 2019)