## 1163-35-1131 Michele Coti Zelati, Nathan Glatt-Holtz and Konstantina Trivisa<sup>\*</sup> (trivisa@umd.edu).

Invariant measures for the stochastic one-dimensional compressible Navier-Stokes equations.

We investigate the long-time behavior of solutions to a stochastically forced one-dimensional Navier-Stokes system, describing the motion of a compressible viscous fluid, in the case of linear pressure law. We prove existence of an invariant measure for the Markov process generated by strong solutions. We overcome the difficulties of working with non-Feller Markov semigroups on non-complete metric spaces by generalizing the classical Krylov-Bogoliubov method, and by providing suitable polynomial and exponential moment bounds on the solution, together with pathwise estimates. (Received September 14, 2020)