Abstract:

In this talk I will introduce several classes of natural invariant measures including physical measures, SRB-measures (standing for Sinai, Ruelle and Bowen) and measures of maximal dimension. These measures are associated with the "typical" dynamics of the underlying dynamical system. I will then present some recent results concerning the existence, uniqueness and characterization of these measures for hyperbolic and parabolic systems. Even though the presented material is technical in nature, I will highlight ideas rather than technical details in order to make the talk accessible to a general audience.