

Relative equilibrium states and random dynamical systems

Jisang Yoo

Sungkyunkwan University

The main subject of this talk is random subshifts of finite type (RSFT) introduced by V.M. Gundlach and Yu. Kifer. This subject will be explained from the point of view of someone whose first interest is in (not random) subshifts. We first explain why RSFTs naturally occur in the study of subshifts and their factor maps. Its connection to the systematic study of entropy theory of random dynamical systems started by Anthony H. Dooley and Guohua Zhang will be mentioned. One novel result we will mention is a way to decompose a non-mixing RSFT into mixing RSFTs. This is useful because RSFTs occurring in mixing subshifts are usually non-mixing and there is a complete theory of mixing RSFTs. This is a non-trivial result because most non-mixing RSFTs that we see are not merely disjoint unions of mixing RSFTs.
