

Geometry, Groups and Dynamics/GEAR Seminar
(held at the Illinois hub of GEAR)

12:00 pm, Tuesday, December 5, 2017, 243 Altgeld Hall
Characteristic random subgroups and their applications
Rostyslav Kravchenko (Northwestern University)

The invariant random subgroups (IRS) were implicitly used by Stuck and Zimmer in 1994 and defined explicitly by Abert, Glasner and Virag in 2012. They were actively studied since then. We define the notion of characteristic random subgroups (CRS) which are a natural analog of IRSs for the case of the group of all automorphisms. We determine CRS for free abelian groups and for free groups of finite rank. Using our results on CRS of free groups we show that for groups of geometrical nature (like hyperbolic groups, mapping class groups and outer automorphisms groups) there are infinitely many continuous ergodic IRS. This is a joint work with R. Grigorchuk and L. Bowen

[Video](#)