COURSE ANNOUNCEMENT APPROXIMATE GROUPS AND EQUIVALENCE RELATIONS MATH 285D, UCLA, WINTER 2019 MWF 10AM-10:50AM, MS 7608

Instructor: Artem Chernikov E-mail: chernikov@math.ucla.edu Office: MS 5372 (Mathematical Sciences Building) Office hours: By appointment

Description. We will discuss approximate groups and approximate equivalence relations, focussing on the infinitary model-theoretic approach and discussing connections with stability theory and its generalizations.

Text. I will follow my own notes. Some materials we will rely on:

- "Stable group theory and approximate subgroups", Ehud Hrushovski
- "The structure of approximate groups", Emmanuel Breuillard, Ben Green, Terence Tao
- "Approximate groups [after Hrushovski, and Breuillard, Green, Tao]", Lou van den Dries
- "Approximate Subroups", Jean-Cyrille Massicot & Frank O. Wagner
- https://terrytao.wordpress.com/tag/approximate-groups/
- https://www.sciencesmaths-paris.fr/en/ehud-hrushovski-739.htm