

## **SHADOWING AND MIXING ON SYSTEMS OF COUNTABLE GROUP ACTIONS**

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**Time: Thu, Nov. 5, 14:30-15:30**

**Tencent room: 108 347 642**

**Abstract:** Let  $(X, G, \Phi)$  be a dynamical system, where  $X$  is compact Hausdorff space, and  $G$  is countable discrete group. Fix some finite subset  $S \subset G$ . We prove that if  $(X, G, \Phi)$  is totally disconnected, then  $\Phi$  has  $S$ -shadowing property if and only if  $(X, G, \Phi)$  is conjugate to an inverse limit of a sequence of shifts of finite type which satisfies Mittag-Leffler condition. Also, suppose that  $X$  is metric space (may be not totally disconnected), we prove that if  $\Phi$  has  $S$ -shadowing property, then  $(X, G, \Phi)$  is a factor of an inverse limit of a sequence of shifts of finite type by a factor map which almost lifts pseudo-orbit for  $S$ .