

## **abstract**

LIE GROUPS, REPRESENTATIONS AND DISCRETE MATH

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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For a discrete group  $G$  and a finite subset  $X$  of  $G$ , let  $K(G, X)$  denote the Kazhdan constant of  $G$  associated to  $X$ . We define the uniform Kazhdan constant of  $G$  by

$$K(G) = \min \{ K(G, X) \mid X \text{ is finite and generates } G \}.$$

Obviously  $K(G) > 0$  for any finite group  $G$ . On the other hand,  $K(G) = 0$  for many infinite Kazhdan groups  $G$  and, moreover, the question of the existence of an infinite group with non-zero uniform Kazhdan constant was open until now. The main goal of this talk is to provide the affirmative answer. This is a joint work with Dmitry Sonkin.