

Department of Mathematics, BGU

Colloquium

On Tuesday, January ,17 2017

At 14:30 – 15:30

In Math 101-

Ori Parzanchevski (Hebrew University of Jerusalem)

will talk about

New directions in Ramanujan graphs and complexes

Abstract: A Ramanujan graph is a finite graph which behaves, in terms of expansion, like its universal cover (which is an infinite tree). In recent years a parallel theory has emerged for simplicial complexes of higher dimension, where the role of the tree is taken by Bruhat-Tits buildings. I will recall briefly the story of Ramanujan graphs, and then explain what are “Ramanujan complexes”, and survey some of the new results regarding their construction and their properties.