## Department of Mathematics, BGU

## Probability and ergodic theory (PET)

On Tuesday, December ,6 2016

At 10:50 – 12:00

In Math 101-

Sebastien Martineau (Weizmann)

will talk about

## The geometry of locally infinite graphs

Abstract: The geometry of graphs is usually studied in the locally finite setup: each vertex has finitely many neighbors. By compactness arguments, one proves some useful and classical regularity theorems for such graphs. Such theorems are easily disproved for locally infinite graphs, but finding homogeneous counterexamples (transitive or Cayley) leads to interesting constructions. I will explain why the geometry of locally infinite graphs is worth studying, present my results, and state some questions I currently cannot answer.