MINICOURSE

Tuesday, May 8th, from 3:00 PM to 5:00 PM
Wednesday, May 9th, from 2:00 PM to 4:00 PM
Thursday, May 10th, from 10:00 AM to 12 PM

In Room AAC 006

To be followed by discussion;

“Vertex-transitive Graphs, Diameter of Groups, and Computation”

Laszlo Babai
(University of Chicago)

Target audience: doctoral students, researchers and Professors in Mathematic.

Abstract :

A graph is "vertex-transitive" if its automorphism group acts transitively on the set of vertices. Cayley graphs are a most important special case.

We shall consider various combinatorial properties of vertex-transitive graphs, Cayley graphs, and finite groups. A simple limit concept will permit an interaction between the study of certain topological properties of finite and infinite, locally finite vertex-transitive graphs. The study of the diameter (a parameter closely related to expansion) and the complexity of computation in finite groups will also be among the highlighted topics.