

ATELIER « LES GRAPHS ET L'ARITHMÉTIQUE »
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WORKSHOP ON GRAPHS AND ARITHMETIC
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Local and global properties of graphs

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I will discuss the relation between the local structure and local properties of a graph, including vertex degrees and allowed neighborhoods but also recurrence of random walk and global properties such as size and planarity. For example, an elegant result of Benjamini and Schramm states (loosely) that (finitary) planar graphs are uniformly recurrent.

The talk will relate to works with Szegedy, Sheffield, Silberman, and Wilson.