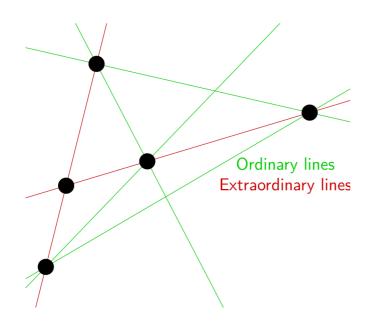
February 18 Tuesday





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Of Points and Lines: Graphs, Metrics, and Betweenness

Given *n* points in the Euclidean plane, they are either all collinear or define at least *n* distinct lines. This result is a corollary of the Sylvester-Gallai theorem. Its combinatorial generalization was proven by de Bruijn and Erdös in the forties.

In 2008, Chen and Chvátal described a generalization of the notion of a line to any metric space and conjectured that the same result remains true in that framework. Since then, a growing community of researchers has been investigating this question. It remains open for metric spaces and even for those specific metric spaces generated by graphs.

In this talk, we shall see a broad overview of the state of research on the matter: results and (many!) remaining open questions.

February 18, 18.10–19.30 Pokrovsky boulevard, 11, room R406 Register at https://cs.hse.ru/en/colloquium

