



Mathematics and CS Seminar

Testing graph properties very quickly

Artur Czumaj (U of Warwick)

Host: Vladimir Kolmogorov

One of the fundamental algorithmic tasks is to efficiently determine basic properties of graphs or networks. For example, we would like to determine very quickly if the input graph is planar, or is well-clusterable, or to quickly estimate the cost of its minimum spanning tree. While in general, exact versions of these problems can be computationally hard, there have been some recent advances in very fast approximation algorithms for some of these problems. We will present some of the recent results in this area and give examples of some basic graph properties that can be very efficiently tested in the framework of property, often in sublinear-time, and sometimes even in constant time. We will also discuss applications and extensions of these results to some classic optimization problems.

Monday, March 12, 2018 10:00am - 11:00am

IST Austria Campus Big Seminar room Ground floor / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.