Algorithmic Problems on Temporal Graphs

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Abstract

Research on Temporal Graphs has expanded in the last few years. Most of the results till now, address problems related to the notion of Temporal Paths (and Temporal Connectivity). In this talk, we focus, instead, on problems whose main topic is not on Temporal Paths. In particular, we will discuss Temporal Vertex Covers, the notion of Temporal Transitivity, and also issues and models of stochastic temporal graphs. We believe that several algorithmic graph problems, not directly related to paths, can be raised in the temporal domain. This may motivate new research towards lifting more topics of algorithmic graph theory to the temporal case.

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