Graphs, Hypergraphs, and the Complexity of Conjunctive Database Queries*

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---- **Abstract** ----

The complexity of evaluating conjunctive queries can depend significantly on the structure of the query. For example, it is well known that various notions of acyclicity can make the evaluation problem tractable. More generally, it seems that the complexity is connected to the "treelikeness" of the graph or hypergraph describing the query structure. In the lecture, we will review some of the notions of treelikeness that were proposed in the literature and how they are relevant for the complexity of evaluating conjunctive queries and related problems.