

# INSTITUTSSEMINAR

On Tuesday, June 16, 2026, at 3:00 PM, in room Z 2073

## Wim Van den Broeck

will give a talk on:

"Join Tree Enumeration".

### Abstract:

Database query optimization is a central ingredient of efficient data processing, as the choice of an execution plan can have a dramatic impact on performance. In this talk, I will give an introduction to query optimization, with a particular focus on the evaluation of  $\alpha$ -acyclic queries; a broad and practically relevant class of queries whose join structure admits especially clean and well-understood algorithms. This setting provides a natural entry point to the problem of query plan generation, where one seeks good ways to organize the computation of joins. Building on this perspective, I will then present my work on the enumeration of join trees, the canonical execution plans for  $\alpha$ -acyclic queries, and discuss the algorithmic ideas behind efficient enumeration.

The results presented in the talk are taken from, "Algorithms for Optimizing Acyclic Queries", (ICDT 2026) which is joint work with Yisu Remy Wang, Zheng Luo and Guy Van den Broeck from the University of California Los Angeles.

**All interested parties are cordially invited.**