

# SQL/PGQ: A Systems Perspective

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## Abstract

The main topic the talk is SQL/PGQ, the new sub-language introduced in SQL:2023 for Property Graph Queries. The talk will cover the history of SQL/PGQ as well as give a short introduction of the syntax and semantics of this language. The talk will touch upon some research challenges posed by SQL/PGQ in database architecture (which is my home area), but also in graph algorithms and their complexity. The talk will also give an update of our effort to implement SQL/PGQ in a real system: namely as an extension module that will add PGQ support to DuckDB. This system, that was developed in my group at CWI, is becoming popular for data engineering and data science and I will also talk about opportunities to integrate PGQ and graph database technology in use cases such as Graph Neural Network training and scoring.

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AMW'23: 15th Alberto Mendelzon International Workshop on Foundations of Data Management, May 22–26, 2023, Santiago, Chile

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