

Chez Pierre

Presents ...

Monday, December 7, 2026

12:00pm – 1:00pm

Duboc room - 4-331



Chez Pierre Seminar

Anton Akhmerov, Delft University

“How nonlinear can a Josephson junction be?”

Conventional Josephson junctions have been studied for decades. Their behavior is well understood in several limits, including weak tunneling, high temperatures, and short or long junctions. Yet making universal statements about the regime in between remains a challenge.

I'll describe how, with the help of AI agents, I found both a universal bound on Josephson-junction nonlinearity and an unusual counterexample to the expected sign: a conventional junction with inverted nonlinearity.