## KAVEH MOUSAVAND, Universite du Quebec a Montreal

tau-Tilting Theory of Gentle Algebras

A modern generalization of tilting theory, called  $\tau$ -tilting theory, has been recently introduced by Adachi, Iyama and Reiten. Among the various areas of research that  $\tau$ -tilting theory has already contributed to, in addition to representation theory of algebras, one can mention cluster algebras, stability conditions in physics, combinatorics, lattice theory, etc.

In this poster, I present some of the major results of my joint work with LaCIM Representation Theory Working Group in which we studied  $\tau$ -tiliting theory of gentle algebras. In particular, over the aforementioned family of algebras, which benefit from rich combinatorics, we give a conceptual model for  $\tau$ -tiliting modules.