Institute of Analysis and Number Theory

Zahlentheoretisches Kolloquium

27.7.2022, 11:00

Seminarraum Analysis-Zahlentheorie

What can Poisson summation do for you?

Niclas Technau

(California Institute of Technology, USA)

Poisson summation, in particular in combination with the theory of oscillatory integrals, is a very versatile tool in analytic number theory. The talk illustrates this statement in the context of pseudo-randomness of sequences. We report on joint work with 1) Athanasios Sourmelidis (TU Graz) and Christopher Lutsko (Rutgers) on fine-scale statistics of slowly growing sequences, and 2) with Rajula Srivastava (U. Bonn) on the density of rational points close to rough hyper-surfaces.

Christoph Aistleitner