Mathematics and CS Seminar

Derivation of the kinetic wave equation

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Host: Laszlo Erdös

It is conjectured by physicists that, in the proper scaling, turbulent behavior in nonlinear dispersive equations can be modeled by kinetic models, similar to Boltzmann's equation arising from Newtonian dynamics. I will present results obtained with Charles Collot, which prove this conjecture up to the kinetic time scale less an arbitrarily small power. The proof relies on the analysis of Feynman graphs in the framework of Bourgain spaces, together with estimates on the distribution of sums of eigenvalues of the underlying linear problem.

Thursday, November 12, 2020 04:15pm - 05:15pm
online via Zoom

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.