PhD Colloquium

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Stable blowup for semilinear wave equations

Nonlinear wave equations exhibit a wide variety of fascinating dynamics. Among them is the formation of singularities in finite time from smooth initial data. This is illustrated e.g. for wave equations with focusing power nonlinearities by an explicit solution, the so-called ODE blowup, in all space dimensions. Whether this blowup mechanism plays a universal role in the generic wave evolution leads to the central question about its stability. This talk gives an elementary introduction to the ideas and methods behind a recently developed stability theory for blowup in wave equations with application to the ODE blowup.

16 October 16:00 – 16:45

Vortragsraum Bibliothek
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