Nonlinear wave equations and applications

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Timetable: 12 hrs. Torre Archimede, Room 2BC/30.

Course requirements: no prerequisite knowledge of the subject is required

Examination and grading: to be decided

SSD: MAT/07

Course contents:

Nonlinear wave equations: Hamiltonian structure; symmetries; singularities; perturbation/deformation problems. Discussion of the (discrete) Fermi-Pasta-Ulam problem in the long-wave limit.