NCTS
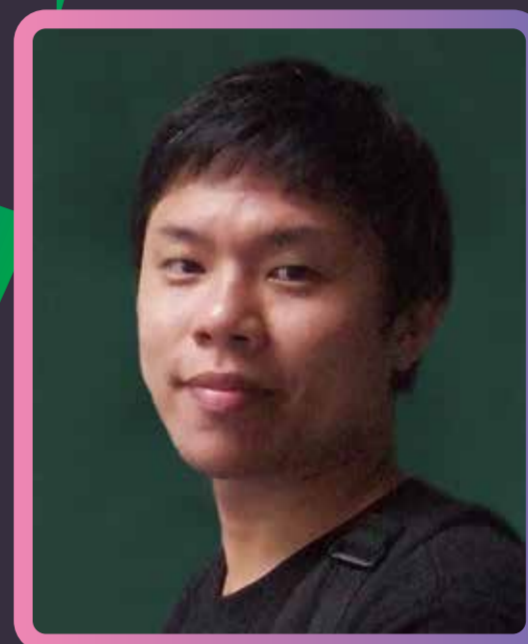National Center for Theoretical Sciences

數值轉成證明 證明化為數值

Computer-Assisted Proofs in Nonlinear Analysis

Speaker
Olivier Hénot
École Polytechnique

Organizer
Jia-Yuan Dai
National Tsing Hua University

Time

11.5~6, 2024

09:00-16:00
from Tuesday to Wednesday

Venue

Room 505+
Online Meeting,
Cosmology Building,
NTU

Contact

Murphy Yu
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Registration

Introduction & Purposes

Nonlinear differential equations are fundamental in science, but numerical methods face limitations from rounding errors and discretization uncertainties. Computer-assisted proofs offer a posteriori validation techniques, enhancing the analysis of complex systems. This lecture series has four sessions, covering the Cauchy problem and periodic solutions in both finite-dimensional and infinite-dimensional settings.

＊**Each session has 1 hour of theory and 1 hour of exercises.**

Prerequisites

Bring your laptop and install software!

Software   Materials   Applications