

Workshop on Nonlinear Hyperbolic PDEs

On the occasion of 60th birthday of Professor Yi Zhou

Date : 24 (Fri.) ~ 25 (Sat.) November 2023.

Venue : Kawai Hall, Tohoku University.
<http://www.math.tohoku.ac.jp/images/campus1.jpg>

Access : Aobayama Station (Subway).
<http://www.math.tohoku.ac.jp/english/access/access-e.html>

Note : This workshop will be held by hybrid style of face-to-face and Zoom.

Program

24 November (Friday)

13:30–13:40 Opening Address

13:40–14:30 **Kunio Hidano (Mie Univ.)**
“Combined effect” and global existence of small solutions to critical-power nonlinear wave equations

14:40–15:30 **Chengbo Wang (Zhejiang Univ.)**
Sharp local well-posedness for quasilinear wave equations with spherical symmetry

15:50–16:40 **Kyouhei Wakasa (National Col. Kushiro)**
On the critical decay for the wave equation with a cubic convolution in three space dimensions

16:50–17:30 **Jie Shao (Fudan Univ., PD)**
Local wellposedness for the quasilinear Schrödinger equations via the generalized energy method

18:30– Welcome Party

25 November (Saturday)

10:30–11:10 **Shunsuke Kitamura (Tohoku Univ., D2)**
The lifespan of classical solutions of semilinear wave equations with weights of space-time variables in one space dimension

11:20–12:00 **Lyu Cai (Fudan Univ., D3)**
Lifespan estimate for compressible Euler equations

14:00–14:30 Shu Takamatsu (Tohoku Univ. M2)

Improvement of the general theory for one dimensional nonlinear wave equations related to the combined effect

14:40–15:30 Kosuke Kita (Waseda Univ.)

On a weighted estimate for the solution to the damped wave equation in 3D

15:50–16:40 Ning-An Lai (Zhejiang Normal Univ.)

Finite time blow up results and lifespan estimate to compressible Euler and MHD system

16:50–17:40 Makoto Nakamura (Osaka Univ.)

On the Klein-Gordon equation under the quartic potential in the de Sitter spacetime

17:40-17:50 Closing address

19:00– Banquet

Organizing Committee :

Hiroyuki Takamura (Chair, Tohoku Univ.), e-mail : hiroyuki.takamura.a1@tohoku.ac.jp,

Ning-An Lai (Zhejiang Normal Univ.),

Soichiro Katayama (Osaka Univ.),

Hideo Kubo (Hokkaido Univ.),

Kyouhei Wakasa (National Col. Kushiro)