

International Symposium
“Function Spaces and Partial Differential Equations”
Osaka University, Japan
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Organisers



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Conference Venue: Machikaneyama Kaikan Hall, Osaka University ([Toyonaka Campus](#)) (大阪大学 [豊中キャンパス](#) 待兼山会館 2F 会議室)

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Featured topics include:

1. *Linear and nonlinear PDEs*
2. *Function spaces*
3. *Generalized functions*
4. *Pseudo-differential operators and symbol classes*
5. *Path spaces and Feynman path integrals*
6. *Related topics*

The aim of the conference is to highlight the use of various function spaces in the modern analysis of linear and nonlinear partial differential equations. The function spaces include Sobolev space-time spaces, Colombeau's algebras, modulation spaces, symbol classes, path spaces, etc.

The program will include several survey lectures on the use of particular function spaces for various problems in PDEs.

TIMETABLE

Confirmed speakers include:

- **Wolfram Bauer** (Tokyo University of Science, Japan)
“Berezin Toeplitz operators, composition formulas and heat flow”
- **Claudia Garetto** (University of Innsbruck, Austria)
“Hypoellipticity in Colombeau theory”
- **Todor Gramchev** (University of Cagliari, Italy)
[“On the Cauchy problem for hyperbolic systems with coefficients admitting superlinear growth for \$|x| \rightarrow \infty\$ ”](#)
- **Fumihiko Hirosawa** (Yamaguchi University, Japan)
“ C^m -theory of damped wave equations with stabilization (joint work with J. Wirth)”
- **Günther Hörmann** (University of Vienna, Austria)
“Case studies in linear PDEs with non-smooth coefficients”
- **Wataru Ichinose** (Shinshu University, Japan)
“The stability of the oscillatory integral operators applied to the Feynman path integral and a problem for it”
- **Tamotu Kinoshita** (University of Tsukuba, Japan)
“Representation formula to hyperbolic equations of second order and its applications”
- **Naoto Kumano-go** (Kogakuin University, Japan)
“Phase space Feynman path integrals via piecewise bicharacteristic paths and their semiclassical approximations (the joint work with D. Fujiwara)”
- **Michael Kunzinger** (University of Vienna, Austria)
“Colombeau algebras in a nutshell”
- **Tokio Matsuyama** (Tokai University, Japan)
“Scattering for the Kirchhoff equation with nonlinear perturbations (Joint work with M. Ruzhansky)”
- **Kiyoshi Mochizuki** (Chuo University, Japan)
“On the scattering theory for wave equations with time dependent coefficients”
- **Yoshinori Morimoto** (Kyoto University, Japan)
“Uncertainty principle and regularity of solutions for Boltzmann type equations (joint work with R. Alexandre, S. Ukai, C-J. Xu and T. Yang)”
- **Michael Ruzhansky** (Imperial College London, UK)
“Bochner's extension problem (joint work with M. Sugimoto)”
- **Roland Steinbauer** (University of Vienna, Austria)
“The wave equation on singular space-times”
- **Naohito Tomita** (Osaka University, Japan)
“Pseudo-differential operators and modulation spaces”
- **Igor Trooshin** (Tokai University, Japan)
“On Inverse Scattering on Noncompact Graphs”