

Functional Equations

September 24th (Tue)

9:20–12:00

- 1 Mika Tanda (Kinki Univ.)[#] Borel sums of the Voros coefficients of the Gauss hypergeometric differential equation in all Stokes regions 15
Takashi Aoki (Kinki Univ.)
- 2 Toshinori Takahashi (Kinki Univ.)[#] The Voros coefficients of the confluent hypergeometric differential equations 15
Mika Tanda (Kinki Univ.)
Takashi Aoki (Kinki Univ.)
- 3 Kohei Iwaki (Kyoto Univ.)[#] Quasi-linear Stokes phenomenon for the second Painlevé transcendents and the exact WKB analysis 15
- 4 Yoshikatsu Sasaki (Hiroshima Univ.)[#] Value distribution of the string equation of type (2,5) 10
- 5 Kunihiko Taniguchi (*) Permanence for a nonautonomous Lotka–Volterra competition system with finite delays 10
(Kokuranishi High School)
- 6 Ichiro Tsukamoto (Toyo Univ.)^{*} On asymptotic behaviour of positive solutions of $x'' = -t^{-\alpha/2-2}x^{1+\alpha}$ ($\alpha > 0$) 15
- 7 Masakazu Onitsuka[#] Attractivity and stability for two-dimensional nonautonomous half-linear differential systems 10
(Okayama Univ. of Sci.)
- 8 Kodai Fujimoto (Osaka Pref. Univ.)[#] Global existence of solutions for second-order nonlinear differential equations 15
Naoto Yamaoka (Osaka Pref. Univ.)
- 9 Hideaki Matsunaga (Osaka Pref. Univ.)[#] Asymptotic behavior of solutions of integral equations with infinite delay 15
- 10 Toshiki Naito[#] Periodic solutions and its successive approximations in nonlinear oscillations 15
(Univ. of Electro-Comm.)*
Rinko Miyazaki (Shizuoka Univ.)
Jong Son Shin (Hosei Univ.)
Dohan Kim (Seoul National Univ.)

14:15–16:30

- 11 Satoshi Tanaka (Okayama Univ. of Sci.)[#] A note on the symmetry-breaking and Morse index for positive solutions of one-dimensional Hénon type equations 15
- 12 Tomoyuki Tanigawa (Kumamoto Univ.)[#] On the existence of generalized regularly varying solutions of second order half-linear functional differential equations 15
- 13 Jitsuro Sugie (Shimane Univ.)[#] Asymptotical stability of a simple pendulum affected by viscous pressure resistance 15
- 14 Kazuyuki Yagasaki (Hiroshima Univ.)[#] Bifurcation diagram of interior single-peak solutions in the Neumann problem of $u'' + \lambda(-u + u^p) = 0$ ($p > 1$ is a real number) 15
- 15 Tetsutaro Shibata (Hiroshima Univ.)[#] Global and local behavior of bifurcation curve for semilinear eigenvalue problem 15
- 16 Tatsuki Mori (Ryukoku Univ.)[#] Global bifurcation structure of stationary solutions for cubic nonlinear equations with nonlocal constraint 15
Kousuke Kuto (Univ. of Electro-Comm.)
Tohru Tsujikawa (Univ. of Miyazaki)
Shoji Yotsutani (Ryukoku Univ.)

- 17 Shingo Takeuchi (Shibaura Inst. of Tech.)[#] Basis problems of generalized Jacobian elliptic functions 15
- 18 Hiroyuki Usami (Gifu Univ.) Inverse blow-up time problem 15
Yutaka Kamimura (Tokyo Univ. of Marine Sci. and Tech.)

16:45–17:45 Talk invited by Functional Equations Section

- Hayato Chiba (Kyushu Univ.)[#] The Painlevé equations on weighted projective spaces

September 25th (Wed)

9:00–12:00

- 19 Fumio Hiroshima (Kyushu Univ.)[#] Lieb–Thirring bound for Schrödinger operator with a Bernstein function of Laplacian 15
- 20 Yuya Dan (Matsuyama Univ.)[#] Lieb–Thirring inequalities for Schrödinger operators 15
- 21 Hiroaki Niikuni (Doshisha Univ.)^{*} On the spectrum of periodic Schrödinger operators on a nanotube with δ - δ - δ vertex conditions 15
- 22 Takuya Watanabe (Ritsumeikan Univ.)[#] Characterization of PDE reducible to ODE under a certain homogeneity and applications to singular Cauchy problems 15
Jiichiroh Urabe (Doshisha Univ.)
- 23 Aya Ishizeki (Saitama Univ.)^{*} Decomposition of the Möbius energy and its variational formula 10
Takeyuki Nagasawa (Saitama Univ.)
- 24 Daisuke Naimen (Osaka City Univ.)[#] Positive solutions of Kirchhoff type elliptic equations involving a critical Sobolev exponent 15
- 25 Daisuke Naimen (Osaka City Univ.)[#] Two sequences of solutions for indefinite superlinear-sublinear elliptic equations with nonlinear boundary conditions 15
Ryuji Kajikiya (Saga Univ.)
- 26 Mieko Tanaka (Tokyo Univ. of Sci.)^{*} Generalized eigenvalue of nonhomogeneous elliptic operators 15
Dumitru Motreanu (Univ. de Perpignan)
- 27 Mieko Tanaka (Tokyo Univ. of Sci.)^{*} Existence of the generalized Fučík spectrum for nonhomogeneous elliptic operators 15
- 28 Ryuji Kajikiya (Saga Univ.)[#] Partially symmetric solutions of the generalized Hénon equation 15

13:15–14:15 Talk invited by Functional Equations Section

- Naohito Tomita (Osaka Univ.)[#] On the boundedness of bilinear Fourier multiplier operators

September 26th (Thu)

9:00–12:00

- 29 Masataka Shibata (Tokyo Tech)[#] The existence of a positive solution to semilinear elliptic equations with periodic potential 15
Yohei Sato (Tokyo Tech/Osaka City Univ.)
- 30 Atsushi Kosaka (Osaka Pref. Univ.)[#] Bifurcation of solutions to semilinear elliptic problems on caps of \mathbf{S}^2 15

- 31 Francesca Gladiali [#] Morse indices of multiple blow-up solutions to the Gel'fand problem
(Univ. degli Studi di Sassari) 15
Massimo Grossi
(Univ. di Roma, La Sapienza)
Hiroshi Ohtsuka (Kanazawa Univ.)
Takashi Suzuki (Osaka Univ.)
- 32 Kousuke Kuto [#] Coexistence steady-states of the Lotka–Volterra competition model with
(Univ. of Electro-Comm.) diffusion and advection 15
Tohru Tsujikawa (Univ. of Miyazaki)
- 33 Yasuhito Miyamoto (Univ. of Tokyo) [#] Structure of the positive radial solutions for the supercritical Neumann
problem $\varepsilon^2 \Delta u - u + u^p = 0$ in a ball 10
- 34 Futoshi Takahashi (Osaka City Univ.) [#] Asymptotic behavior of least energy solutions for a 2D nonlinear Neu-
mann problem with large exponent 12
- 35 Ryuji Kajikiya (Saga Univ.) [#] Stability of stationary solutions for a sublinear parabolic equation 15
Goro Akagi (Kobe Univ.)
- 36 Takefumi Igarashi (Nihon Univ.) ^{*} Life span of solutions for a quasilinear parabolic equation with initial
data having positive limit inferior at infinity 15
- 37 Jin Takahashi (Tokyo Tech) [#] Removability of time-dependent singularities in the heat equation 10
Eiji Yanagida (Tokyo Tech)
- 38 Yoshihito Kohsaka [#] Traveling spots of singular limit problems of FitzHugh–Nagumo type
(Muroran Inst. of Tech.) equations 10
Yan-Yu Chen (Tamkang Univ.)
Hirokazu Ninomiya (Meiji Univ.)
- 39 Masaharu Taniguchi (Okayama Univ.) [#] An N -dimensional traveling front solution in the Allen–Cahn equation
associated with an $(N - 2)$ -dimensional surface 15
- 14:15–16:30**
- 40 Keisuke Takasao (Hokkaido Univ.) ^{*} Existence of mean curvature flow with external force term 10
- 41 Hiroyoshi Mitake (Fukuoka Univ.) ^{*} A dynamical approach to the large-time behavior of solutions to weakly
Hung Vinh Tran (Univ. of Chicago) coupled systems of Hamilton–Jacobi equations 10
- 42 Hiroyoshi Mitake (Fukuoka Univ.) ^{*} The large-time asymptotic analysis by a nonlinear adjoint technique:
Filippo Cagnetti (Univ. of Sussex) semilinear degenerate parabolic equations 10
Diogo Gomes
(Univ. Tecnica de Lisboa/K. A. U. S. T)
Hung Vinh Tran (Univ. of Chicago)
- 43 Masakazu Yamamoto (Hiroshima Univ.) ^{*} Space-time structure of solutions to the drift-diffusion equation with
anomalous diffusion 15
- 44 Tsukasa Iwabuchi (Chuo Univ.) ^{*} Ill-posedness for the drift diffusion system of bipolar type 15
Takayoshi Ogawa (Tohoku Univ.)
- 45 Tetsuya Yamada ^{*} Non-trivial ω -limit sets and oscillating solutions in a chemotaxis model
(Fukui Nat. Coll. of Tech.) in \mathbb{R}^2 with critical mass 15
Julián López-Gómez
(Univ. Complutense de Madrid)
Toshitaka Nagai (Hiroshima Univ.)

- 46 Sachiko Ishida (Tokyo Univ. of Sci.)[#] Global-in-time bounded solutions to degenerate Keller–Segel systems with chemotaxis sensitivity 15
Xinru Cao
(Univ. Paderborn/Dalian Univ. of Technology)
- 47 Kentarou Fujie (Tokyo Univ. of Sci.)[#] Global existence and boundedness of solutions to Keller–Segel systems with signal-dependent sensitivity 15
Michael Winkler (Univ. Paderborn)
Tomomi Yokota (Tokyo Univ. of Sci.)
- 48 Noriko Mizoguchi [#] Boundedness of global solutions in the two-dimensional parabolic Keller–Segel system 15
(Tokyo Gakugei Univ.)
Michael Winkler (Univ. of Paderborn)

16:45–17:45 Talk invited by Functional Equations Section

- Shuji Machihara (Saitama Univ.)[#] On the Cauchy problems for the system of Dirac equations with quadratic nonlinearities in 1d

September 27th (Fri)

9:00–12:00

- 49 Yusuke Sugiyama (Tokyo Univ. of Sci.)[#] Remark on global solvability for some 1-D quasilinear wave equation 10
- 50 Yuta Wakasugi (Osaka Univ.)^{*} Blow-up of solutions to the semilinear wave equation with damping depending on time and space variables 10
- 51 Mohammad Rammaha ^{*} Blow-up of solutions to semilinear wave equations with non-zero initial data 10
(Univ. of Nebraska-Lincoln)
Hiroyuki Takamura
(Future Univ.-Hakodate)
Hiroschi Uesaka (Nihon Univ.)
Kyouhei Wakasa (Hokkaido Univ.)
- 52 Takamori Kato (Nagoya Univ.)[#] Unconditional well-posedness of the fourth order Schrödinger equation with periodic boundary condition 10
- 53 Nobu Kishimoto (Kyoto Univ.)[#] Unconditional well-posedness for the periodic cubic nonlinear Schrödinger equation 15
- 54 Satoshi Masaki (Hiroshima Univ.)[#] On minimal blow-up solution for L^2 subcritical nonlinear Schrödinger equation 15
- 55 Mamoru Okamoto (Kyoto Univ.)[#] Ill-posedness for the Chern–Simons–Dirac system in one dimension ... 10
Shuji Machihara (Saitama Univ.)
- 56 Kazumasa Fujiwara (Waseda Univ.)[#] Well posedness of the Cauchy problem for a semirelativistic system with quadratic nonlinearity 15
Shuji Machihara (Saitama Univ.)
Tohru Ozawa (Waseda Univ.)
- 57 Hiroyuki Hirayama (Nagoya Univ.)[#] Well-posedness for a system of quadratic derivative nonlinear Schrödinger equations at the scaling critical regularity 15
- 58 Tomoya Kato (Nagoya Univ.)^{*} The global Cauchy problems for the nonlinear dispersive equations on modulation spaces 10
- 59 Gaku Hoshino (Waseda Univ.)[#] Analytic smoothing effect for a system of nonlinear Schrödinger equations 15
Tohru Ozawa (Waseda Univ.)
- 60 Nakao Hayashi (Osaka Univ.)^{*} Scattering problem for the supercritical nonlinear Schrödinger equation in 1d 10

14:15–16:30

- 61 Masashi Ohnawa (Waseda Univ.)* Asymptotic stability of shock waves in a radiating gas model for initial data with multiple discontinuities 15
- 62 Yoshiyuki Kagei (Kyushu Univ.)# Existence and stability of time-periodic solution of the compressible Navier–Stokes equation 15
Kazuyuki Tsuda (Kyushu Univ.)
- 63 Yasunori Maekawa (Tohoku Univ.)# Remark on the Helmholtz decomposition in domains above Lipschitz graphs 15
Hideyuki Miura (Osaka Univ.)
- 64 Helmut Abels (Univ. of Regensburg)# Existence of weak solutions for a diffuse interface model of non-Newtonian two-phase flows 15
Lars Diening (LMU Munich)
Yutaka Terasawa (Univ. of Tokyo)
- 65 Jan Prüss (Univ. Halle)* Stability of equilibria for incompressible two-phase flows with phase transitions —The case of variable surface tension— 15
Senjo Shimizu (Shizuoka Univ.)
Gieri Simonett (Univ. Vanderbilt)
Mathias Wilke (Univ. Halle)
- 66 Hirokazu Saito (Waseda Univ.)# On the Stokes equations with surface tension in the half space 10
Yoshihiro Shibata (Waseda Univ.)
- 67 Miho Murata (Waseda Univ.)# On the sectorial \mathcal{R} -boundedness of the Stokes operator for the compressible viscous fluid flow and its application 10
Yoshihiro Shibata (Waseda Univ.)
- 68 Yoshihiro Shibata (Waseda Univ.)# On the \mathcal{R} -boundedness of the solution operators in the study of the compressible viscous fluid flow with free boundary conditions 10
Dario Goetz (atesio GmbH)
- 69 Yoshihiro Shibata (Waseda Univ.)# On the \mathcal{R} -boundedness of solution operators for the compressible-incompressible two phase problem 10
Takayuki Kubo (Univ. of Tsukuba)
Kohei Soga (Waseda Univ.)

16:45–17:45 Talk invited by Functional Equations Section

- Goro Akagi (Kobe Univ.)# Asymptotic behavior of solutions for nonlinear diffusion equations