理工学術院・先進理工・応用物理学科　　　小澤徹

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出版された論文

1. K. Li, T. Ozawa, B. Wang
   Dynamical behavior for the solutions of the Navier-Stokes equation,
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   DOI:10.3934/cpaa.2018073 (Open Access)

2. N. Bez, C. Jeavons, T. Ozawa, M. Sugimoto
   Stability of trace theorems on the sphere,
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3. K. Fujiwara, T. Ozawa
   Lifespan of strong solutions to the periodic derivative nonlinear Schrödinger equation,
   Evolution Equations and Control Theory, 7, Number 2, (2018),
   275-280. DOI:10.3934/eect.2018013 (Open Access)

4. K. Fujiwara, V. Georgiev, T. Ozawa
   Higher order fractional Leibniz rule,
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5. K. Fujiwara, V. Georgiev, T. Ozawa
   Blow-up for self-interacting fractional Ginzburg-Landau equation,
   Dynamics of PDE, 15, No.3, (2018), 175-182.
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6. J. Fan, T. Ozawa
   Global well-posedness of weak solutions to the time-dependent Ginzburg-Landau model for
   superconductivity,
   Taiwanese J. Math., 22, No.4, (2018), 851-858.
   DOI:10.11650/tjm/180102 (Open Access)

7. K. Fujiwara, V. Georgiev, T. Ozawa
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8. L. Forcella, K. Fujiwara, V. Georgiev, T. Ozawa
   Local well-posedness and blow-up for the half Ginzburg-Landau-Kuramoto equation with rough
   coefficients and potential,
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9. T. Ozawa, M. Ruzhansky, D. Suragan
   L^p-Caffarelli-Kohn-Nirenberg type inequalities on homogeneous groups,
   Quaterly J. Math., 70, Issue 1, (2019), 305-318.
   DOI:10.1093/qmath/hay040 (Open Access)

10. K. Fujiwara, T. Ozawa
    Lifespan of periodic solutions to nonlinear Schr¥"odinger equations,
    Nonlinear Wave and Dispersive Equations," RIMS Kokyuroku 2093(2018), 38-46.
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11. S. Machihara, T. Ozawa, H. Wadade
    Remarks on the Hardy type inequalities with remainder terms in the framework of equalities,
    Adv. Studies Pure Math., (in press).

研究発表

1. On improved Hardy inequalities
   Workshop in Hangzhou 2018
   April 8, 2018
   Zhejiang University, Hangzhou, China

2. Improved Hardy inequalities
   PDE Workshop
   April 30, 2018
   Sichuan Normal University, Sichuan, China

3. Lifespan estimates of solutions to NLS without gauge invariance
   PDE Seminar
   May 3, 2018
   Peking University, Peking, China

4. Improved Hardy inequalities
   Celebrating Approximate 60s -- An International Conference on Nonlinear PDEs and Its
   Applications at NYU Shanghai
   June 19, 2018
   NYU Shanghai, Shanghai, China

5. Lifespan of blowup solutions of DNLS type equation on the torus
   PDE Seminar
   June 20, 2018
   Fudan University, Shanghai, China

6. さまざまなハーディー型不等式
   作用素論セミナー
   May 25, 2018
   Kyoto University, Kyoto, Japan

7. Improved Hardy inequalities
   Nonlinear Dispersive Equations at Florianopolis
   July 28, 2018
   Hotel Mar de Canasvieiras, Florianopolis, Brazil

8. Improved Hardy inequalities
   Mathematical Fluid Mechanics and Related Topics - in honor of Professor Hideo Kozono's
   sixtieth birthday -
   September 6, 2018

東京工業大学, Tokyo, Japan

9. 微分型シュレディンガー方程式の自己相似解
   PDE Workshop in Miyazaki
   January 9, 2019
   宮崎大学, Miyazaki, Japan

10. Cauchy problem for the quasilinear evolution equation of transverse wave model
    PDE Workshop Waseda - GSSI, L'Aquila-Pisa
    February 21, 2019
    University of Pisa, Pisa, Italy

会議主催

1. [非線型科学コロキウム]
   場所：早稲田大学
   開催日
   2018/5/29　福本 康秀　九州大学 マス・フォア・インダストリ研究所 教授
   "Effect of compressibility on stability of a planar front of premixed flame"
   2018/6/14　山田 道夫　京都大学数理解析研究所 教授
   "Wave resonance and zonal flow formation"
   2018/6/29　前川 卓　横浜国立大学 教授
   「モノづくりの原点、それはカタチ」

2. International Workshop on "Fundamental Problems in Mathematical and Theoretical Physics"
   Top Global University Project, Waseda University
   日時: 2018/7/16-21
   会場: 早稲田大学 西早稲田キャンパス 55 号館 N 棟 1 階大会議室

3. 第 43 回偏微分方程式論札幌シンポジウム
   日時: 2018/8/21-23
   会場: 北海道大学 理学部 7 号館 7-310、7-219/220

4. Waseda Workshop on Partial Differential Equations
   日時: 2018/12/20
   会場: 早稲田大学 西早稲田キャンパス 62 号館 W 棟 1 階大会議室

5. Waseda Workshop on Partial Differential Equations 2019
   日時: 2019/3/22-23
   会場: 早稲田大学 西早稲田キャンパス 55 号館 N 棟 1 階大会議室

研究成果

1. 数理物理に現れる様々な非線型偏微分方程式を函数解析的に研究した。
2. 様々な不等式の等式的枠組について研究した。