

出版された論文

1. J. Fan, T. Ozawa
A note on bilinear estimates in the Sobolev spaces,
International Journal of Mathematical Analysis, **13**, no.12, (2019), 551-554.
<https://doi.org/10.12988/ijma.2019.91064>
2. J. Fan, T. Ozawa
Cauchy problem and vanishing dispersion limit for Schrödinger-improved Boussinesq equations,
J. Math. Anal. Appl., **485**, Issue 2, (2020), 123857.
<https://doi.org/10.1016/j.jmaa.2020.123857> (Open Access)
3. N. Bez, S. Machihara, T. Ozawa
Hardy type inequalities with spherical derivatives,
SN Partial Differ. Equ. Appl., **1**, Issue 1, (2020), Article 5.
<https://doi.org/10.1007/s42985-019-0001-1> (Open Access)
4. K. Fujiwara, V. Georgiev, T. Ozawa
On global well-posedness for nonlinear semirelativistic equations in some scaling subcritical and critical cases, J. Math. Pures Appl., **136**, (2020), 239-256.
<https://doi.org/10.1016/j.matpur.2019.10.003> (Open Access)
5. J. Fan, T. Ozawa
A blow-up criterion for the modified Navier-Stokes-Fourier equations,
Journal of Mathematical Fluid Mechanics, **22**, (2020), Article number 16.
<https://doi.org/10.1007/s00021-019-0477-7> (Open Access)
6. K. Fujiwara, V. Georgiev, T. Ozawa
Self-similar solutions to the derivative nonlinear Schrödinger equation,
Journal of Differential Equations, **268**, Issue 12, (2020), 7940-7961.
<https://doi.org/10.1016/j.jde.2019.11.089>
7. L. Forcella, K. Fujiwara, V. Georgiev, T. Ozawa
Blow-up or global existence for the fractional Ginzburg-Landau equation in multi-dimensional case, "New Tools for Nonlinear PDEs and Applications," Trends in Mathematics, Birkhäuser (2019), 179-202.
8. M. Karazym, T. Ozawa, D. Suragan,
Multidimensional inverse Cauchy problems for evolution equations,
Inverse Problems in Science and Engineering, (in press).
9. J. Fan, T. Ozawa
Regularity criteria for a Ginzburg-Landau-Navier-Stokes system,
Funkcialaj Ekvacioj, (in press).

研究発表

1. T. Ozawa
Self-similar solutions to the derivative nonlinear Schrödinger equation
Conference on "Nonlinear Dispersive Waves, Solitons and related topics"

11 June 2019
INSTITUT MITTAG-LEFFLER, Djursholm, Sweden
Invited

2. T. Ozawa
Self - similar solutions to the derivative nonlinear Schrödinger equation
12th ISAAC Congress
30 July 2019
University of Aveiro, Portugal
Plenary
3. T. Ozawa
微分型相互作用をもつ非線型シュレディンガー方程式の自己相似解
第9回岐阜数理科学研究会
9 September 2019
飛騨高山まちの博物館 研修室, Gifu, Japan
Invited
4. T. Ozawa
Self-similar solutions to the derivative nonlinear Schrödinger equation
International Conference “Actual Problems of Analysis, Differential Equations and Algebra”(National academy of sciences of the Republic of Kazakhstan)
16 October 2019
L.N. Gumilyov Eurasian National University, Nur-Sultan, Kazakhstan
Plenary
5. T. Ozawa
Minimization problem on the action
PDE Workshop
1 November 2019
Peking University, China
Invited
6. T. Ozawa
ポワンカレの不等式・温故知新
微分方程式セミナー
24 January 2020
Osaka University, Japan
Invited
7. T. Ozawa
Existence and Uniqueness of Classical Paths under Quadratic Potentials
The 37th Kyushu Symposium on Partial Differential Equations
28 January 2020
Kyushu University Nishijin Plaza, Japan
Invited

図書

1. M. D'Abbico, M. R. Ebert, V. Georgiev, T. Ozawa (Eds.),
New Tools for Nonlinear PDEs and Application,
Trends in Mathematics, Birkhäuser 2019, viii+390pp.
2. K. Kato, T. Ogawa, and T. Ozawa (Eds.),
Asymptotic Analysis of Nonlinear Dispersive and Wave Equations,
Advanced Studies in Pure Mathematics, 81, 2019, Mathematical Society of Japan, 419pp.

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
2019/11/19 吉田 善章 東京大学 大学院 新領域創成科学研究科 教授
“Lie-Poisson 代数の変形とカイラリティー”
2. International Workshop on “Fundamental Problems in Mathematical and Theoretical Physics”
Top Global University Project, Waseda University
日時: 2019/7/22-26
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 44 回偏微分方程式論札幌シンポジウム
日時: 2019/8/5-7
会場: 北海道大学 理学部 3 号館 3-309
4. Waseda Workshop on Partial Differential Equations
日時: 2019/12/17
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

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。