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. J. Fan, T. Ozawa
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Zeitschrift für angewandte Mathematik und Physik, **71**, 136 (2020).
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2. T. Ozawa, D. Suragan
Sharp remainder of the Poincaré inequality,
Proceedings of the American Mathematical Society, **148**, Number 10, (2020), 4235-4239.
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3. M. Karazym, T. Ozawa, D. Suragan
Multidimensional inverse Cauchy problems for evolution equations,
Inverse Problems in Science and Engineering, **28**, 11, (2020), 1582-1590.
https://doi.org/10.1080/17415977.2020.1739034

4. J. Fan, T. Ozawa
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5. T. Ozawa, D. Suragan
Poincaré inequalities with exact missing terms on homogeneous groups,
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6. J. Fan, T. Ozawa
Regularity criteria for a Ginzburg-Landau-Navier-Stokes system,
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7. J. Restrepo, T. Ozawa, D. Suragan
Inverse abstract Cauchy problem,
Applicable Analysis, (in press).

## 研究発表

1. T. Ozawa
On the Poincaré and Related Inequalities
International Workshop on Multiphase Flows: Analysis, Modelling and Numerics
20201201
Waseda University（Online）
Invited

## 図書

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Proceedings of 45th Sapporo Symposium on Partial Differential Equations,
Hokkaido University Technical Report Series in Mathematics, **179**, 2020, 98pp.

2. V. Georgiev, T. Ozawa, M. Ruzhansky, and J. Wirth (Eds.),
   Advances in Harmonic Analysis and Partial Differential Equations,
   Trends in Mathematics, Birkhäuser, 2020, 317pages.

3. Y. Giga, N. Hamamuki, H. Kubo, H. Kuroda, and T. Ozawa (Eds.),
   The Role of Metrics in the Theory of Partial Differential Equations,
   Advanced Studies in Pure Mathematics, **85**, 2020, Mathematical Society of Japan, 543pp.

## 会議主催

1. 第 45 回偏微分方程式論札幌シンポジウム
   日時: 2020/8/17-19
   会場: オンライン

## 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。