

Oguz YILMAZ

PHD STUDENT · MATHEMATICS

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Education

Bogazici University

PHD STUDENT

- Advisor: Prof. Dr. T. Burak Gürel

Istanbul/TURKEY

2022 - Present

Bogazici University

MSC DEGREE IN MATHEMATICS

- Advisor: Prof. Dr. T. Burak Gürel
- Master Thesis Title: Global Well-posedness of NLS Equations, pdf

Istanbul/TURKEY

2020 - 2022

Bogazici University

BS UNDERGRADUATE DEGREE FROM MATHEMATICS

- Undergraduate research advisor: Prof. Dr. T. Burak Gürel
- Senior Research Project Title: Asymptotic Behaviour of Nonlinear Systems, pdf

Istanbul/TURKEY

2017 - 2020

Research Interests

Nonlinear partial differential equations,
Fourier and Harmonic Analysis,
Stochastic partial differential equations,
Analysis on Riemannian and pseudo-Riemannian Manifolds,

Master Thesis

TOPIC

The I-method and Global Dynamics of Nonlinear Schrödinger Equations

THE MAIN ARTICLES

1. J. Colliander, M. Keel, G. Staffilani, H. Takaoka, T. Tao- Almost Conservation Laws and Global Rough Solutions to a Non-linear Schrödinger equation, 2002, arXiv:math/0203218
2. J. Colliander, M. Keel, G. Staffilani, H. Takaoka, T. Tao- Resonant Decompositions and the I -method for cubic Nonlinear Schrödinger Equation on \mathbb{R}^2 , 2007, arXiv:0704.2730

Awards, Fellowships, & Grants

- 2021 **2210-National Scholarship Programme for MSc Students**, Scientific and Technological Research Council of Turkey
- 2020 **2210-National Scholarship Programme for MSc Students**, Scientific and Technological Research Council of Turkey

Presentations

Oguz Yilmaz. May 2021. On Sobolev Spaces. Departmental Mathematics Graduate Webinar, [webinar poster](#)

Oguz Yilmaz. May 2021. Final Presentation Project of Graduate Real Analysis Course: Sobolev Spaces and the Contraction Principle on Nonlinear Schrödinger Equation, [pdf](#)

Oguz Yilmaz. May 2021. Complementary Content for the Graduate Real Analysis Course: Interpolation of L^p spaces and Linear Operators, pdf

Oguz Yilmaz. July 2020. Final Project of Graduate Probability Theory Course: Stochastic Solutions of the Wave Equation, pdf

Oguz Yilmaz. March 2020. The Hilbert Transform. Departmental Mathematics Graduate seminar: Bogazici University Mathematics Department, Istanbul, details

Teaching Experience

Fall2022 - **Mathematics Department of Bogazici University**, Teaching Assistantship: Math331-Metric Spaces, Math101-Calculus I

Fall 2021 **Math54 from University of California Berkeley**, Private lesson

Fall 2020 **Math54 from University of California Berkeley**, Private lesson

Publications

1. E. Başakoğlu, T. B. Gürel, O. Yilmaz, Global well-posedness for the nonlinear biharmonic Schrödinger equation on \mathbb{R}^2 , preprint version