Yankı Lekili

CONTACT INFORMATION

Department of Mathematics
Massachusetts Institute of Technology
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PERSONAL

Born October, 1983 in Gaziantep, Turkey. Citizenship: Turkish.

EDUCATION

Massachusetts Institute of Technology 2005 - 2009

Ph.D. Mathematics

- Dissertation Topic: *Broken Lefschetz fibrations, Lagrangian matching invariants and Ozsváth-Szabó invariants*
- Advisor: Denis Auroux

École Normale Supérieure de Lyon 2004 - 2005

Maîtrise, Pure Mathematics. Mention Bien.

University of California, Berkeley 2003 - 2004

Education abroad exchange student.

Bilkent University 2001 - 2004

B.A. in Mathematics.

APPOINTMENTS

2009 - 2010 MSRI Postdoctoral Fellow, Symplectic and Contact Geometry and Topology.
2010 - Herchel Smith Postdoctoral Research Fellow and Junior Research Fellow of King's College, University of Cambridge.

RESEARCH INTERESTS

Symplectic topology, Gauge theory, Low-dimensional topology.

ACADEMIC HONORS

Charles and Jennifer Johnson Prize, MIT departmental award (best paper submitted by a graduate student), 2009.
MIT, Presidential Fellowship, 2006.
MIT, Norman Levinson Fellowship, 2005.
ENS de Lyon, Bourse internationale, 2004.
University of California, Berkeley, Dean's Honor List, 2003.
Bilkent University, Full scholarship for high achievement in nationwide University Entrance Exam, 2001.

PUBLICATIONS

Wrinkled fibrations on near-symplectic manifolds.
Geomety & Topology 13 (2009) 277–318. *arXiv:0712.2202.*

Heegaard Floer homology of broken fibrations over the circle.
Submitted. *arXiv:0903.1773.*

Examples of planar tight contact structures with support norm one (with T. Etgü).
arXiv:0911.0470.

Lagrangian correspondences and three-manifold invariants, in preparation (with T. Perutz).

Invited Talks

February 2008, Geometry Seminar, MIT, Cambridge (MA)
Wrinkled fibrations on near-symplectic manifolds

April 2008, Symplectic Geometry Seminar, Columbia University, New York (NY)
Wrinkled fibrations on near-symplectic manifolds

May 2008, Gökova Geometry/Topology Conference, Gökova (Turkey)
Wrinkled fibrations on near-symplectic manifolds

Nov 2008, Indiana-Illinois Symplectic Geometry Conference, Notre Dame Univ., Notre Dame (IN)
Wrinkled fibrations on near-symplectic manifolds

Nov 2008, Geometry/Topology Seminar, USC, Los Angeles (CA)
Broken Lefschetz fibrations and Floer theoretical invariants

Dec 2008, Geometry Topology Seminar, GaTech, Atlanta (GA)
Broken Lefschetz fibrations and Floer theoretical invariants

Jan 2009, Symplectic Geometry Seminar, Columbia University, New York (NY)
Heegaard Floer homology of broken fibrations

Mar 2009, Interactions of geometry and topology in low dimension, Banff (Canada)
Heegaard Floer homology of broken fibrations

May 2009, Georgia International Topology Conference, Athens (GA)
Heegaard Floer homology of broken fibrations

June 2009, Geometry Topology Seminar, Koç University, Istanbul (Turkey)
Heegaard Floer homology of broken fibrations

Sep 2009, Symplectic Geometry Seminar, MSRI, Berkeley (CA) (2 lectures)
Lagrangian matching invariants and Heegaard Floer homology

My work was also mentioned in:

June 2008, *Broken Lefschetz fibrations for all smooth oriented 4–manifolds*, talk by Robion Kirby at MSRI Hot Topics: Contact structures, dynamics and the Seiberg-Witten equations in dimension 3.

August 2008, *Broken Lefschetz fibrations on smooth 4–manifolds*, talk by Denis Auroux at MSRI Low-dimensional topology conference.

Teaching Experience

Lecturer, Single variable calculus (18.01), Winter 2009, MIT.
Teaching Assistant/Recitation Instructor, Linear Algebra, Fall 2007, MIT.
Research advisor, Summer 2006, RSI, MIT. Subject: Enumerative Tropical Geometry.

Students:
Ping Fung Ng (received one of the top ten commendations for his research at MIT).
Yasin Razlik

Teaching Assistant, Algebraic Geometry, Fall 2006, MIT.