

CURRICULUM VITAE

MARCO ALDI

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Employment

2012 - Present

Assistant Professor.

Department of Mathematics and Applied Mathematics, *Virginia Commonwealth University*.

2010 - 2012

NSF FRG Postdoctoral Fellow and Adjunct Assistant Professor.

Department of Mathematics, joint appointment with Physics, *Brandeis University*.

Mentors: Bong Lian, Albion Lawrence (Physics).

2007 - 2010

Charles B. Morrey Assistant Professor.

Department of Mathematics, *University of California at Berkeley*.

Mentor: Edward Frenkel.

Education

2007 Ph.D. in Mathematics - *Northwestern University*.

Thesis: A-branes and Mirror Symmetry.

Advisor: Eric Zaslow.

2002 Laurea (Cum Laude) in Mathematics - *Università degli Studi di Milano (Italy)*.

2001 Master of Science in Pure Mathematics - *University of East Anglia (UK)*.

Publications

- M. Aldi, R. Heluani, *Dilogarithms, OPEs and T-duality*, IMRN (accepted for publication).
- M. Aldi, *Twisted Homogeneous Coordinate Rings of Abelian Surfaces via Mirror Symmetry*, Proc. Amer. Math. Soc. 137, (2009) no. 8, 2741-2747.
- M. Aldi, E. Zaslow, *Seidel's Mirror Map for Abelian Varieties*, Adv. Theor. Math. Phys. (2006), v. 10, no. 4.
- M. Aldi, E. Zaslow, *Coisotropic Branes, Noncommutativity and the Mirror Correspondence*, J. High Energy Phys. (2005), no. 6.

Teaching Experience

As Principal Instructor:

at *Virginia Commonwealth University*

Linear Algebra; Fall 2012.

at *Brandeis University*

Topics in Algebra (graduate); Fall 2012.

Complex Algebraic Geometry I (graduate); Fall 2011.

Algebraic Geometry I, II (graduate); Fall 2010, Spring 2011.

at *UC Berkeley*

Linear Algebra; Fall 2007, Spring 2008, Fall 2008.

Complex Analysis; Fall 2008, Spring 2009.

Elementary Algebraic Topology; Spring 2008, Fall 2009.

Introduction to Analysis; Fall 2009, Spring 2010.

As Teaching Assistant at *Northwestern University*:

Calculus (9 quarters); Fall 2002-Spring 2005.

Linear Algebra; Spring 2004, Fall 2005, Winter 2006.

Mathematical Modeling of Finance; Fall 2004.

Probability and Stochastic Processes; Fall 2005, Winter 2006.

Abstract Algebra; Fall 2003.

Introduction to Real Analysis; Fall 2004, Winter 2004.

Activity as Advisor/Supervisor

Ph.D. Thesis

Berglund-Hübsch Duality and Arithmetic Mirror Symmetry.
Andrija Perunicic, *Brandeis University*; Spring 2011-present.

Undergraduate Research Projects

A New Approach to Solving the Hermitian Yang-Mills Equations; (senior thesis in Physics).
Netta Engelhardt, co-supervised with Matthew Headrick, *Brandeis University*; 2010-2011.
Generalized Weil-Brezin Transform (senior research project).
Gautam Wilkins, *UC Berkeley*; 2009-2010 .

Reading Courses

Diophantine Geometry (graduate), *Brandeis University*; Spring 2012.
Algebraic Groups (graduate, minor exam project), *Brandeis University*; Spring 2011-Fall 2011.
Picard-Fuchs Equations (graduate), *Brandeis University*; Spring 2011-Fall 2011.
Weil's Conjectures (graduate, minor exam project), *Brandeis University*; Fall 2010.
Introduction to String Theory (undergraduate), *UC Berkeley*; Spring 2010.

Seminars Organized

Analysis and Physics (co-organizer); VCU, Fall 2012 - present.
Arithmetic Mirror Symmetry (organizer); Brandeis, Fall 2011.
Motives (co-organizer), Spring 2011 - Fall 2011.

Committee Service

Undergraduate Affairs; VCU, Fall 2012.
Undergraduate Curriculum; VCU, Fall 2012.
Undergraduate Credentials; VCU, Fall 2012.
Capstone; VCU, Fall 2012.
Graduate Affairs; Brandeis, Fall 2010-Spring 2012.

Other Service

Ph.D. Defense Committee, *Uppsala University* (Sweden), Physics Department; Fall 2011.

Referee for peer reviewed journals (areas: Algebra, Geometry and Physics).

Invited Talks

Mathematical Physics Seminar, *IMPA, Rio de Janeiro*; Spring 2012.

Theory Group Seminar, *Brandeis University*; Spring 2012.

Algebra Seminar, *CUNY*; Spring 2012.

Geometry of Strings and Fields, *Nordita, Stockholm*; Fall 2011.

Geometry Seminar, *Boston University*; Fall 2010, Fall 2011.

AMS Regional Conference, *Cornell University*; Fall 2011.

Workshop on Generalized Geometries, *Texas A&M University*; Spring 2011.

Everytopic Seminar, *Brandeis University*; Spring 2011.

Miniprogram on Langlands-Type Dualities in Quantum Field Theory, *KITP*; Summer 2010.

Algebraic Geometry and Number Theory Seminar, *Colorado State University*; Spring 2010.

Workshop on Generalized Complex and Holomorphic Poisson Geometry, *BIRS*; Spring 2010.

Workshop on Generalized Geometries, *Brandeis University*; Spring 2010.

Algebraic Geometry Seminar, *University of Utah*; Fall 2009.

Workshop on Mirror Symmetry, *University of Miami*; Winter 2009.

Workshop on Mirror Symmetry, *Hausdorff Institute*; Summer 2008.

Topology Seminar, *UC Berkeley*; Spring 2008.

Northern California Symplectic Geometry Seminar, *UC Berkeley*; Fall 2007.

Representation Theory, Geometry and Combinatorics Seminar, *UC Berkeley*; Fall 2007.

Workshop on K3 Surfaces, *University of Washington*; Summer 2007.

Workshop on Algebraic Geometry, *University of Milan*; Fall 2006.

Algebraic Geometry Seminar, *Columbia University*; Fall 2006.

Geometry/Physics Seminar, *University of Michigan*; Fall 2006.

Workshop on String Dualities and Modular Forms. *BIRS*; Spring 2006.

Workshop on Mirror Symmetry, *Fields Institute*; Winter 2006.

String Theory Seminar, *University of Wisconsin Madison*; Spring 2005.

Geometry/Physics Seminar, *Northwestern University*; Winter 2005.

Awards

Best Thesis in Mathematics Award, *Northwestern University*; 2007.

Helen M. Galvin Dissertation Fellowship, *Northwestern University*; 2006.

Summer Research Fellowship, *Northwestern University*; 2003-2006.

University Fellowship, *Northwestern University*; 2002-2003.

Young Scientist Fellowship, *Università degli Studi di Milano*; 2002.

Italian Merit Scholarship; 1998-1999.

Italian Commerce Bank Merit Scholarship; 1997-2002.

Citizenship

Italian, U.S. Permanent Resident.