

Curriculum Vita
Gideon Maschler

Department of Mathematics and Computer Science
Clark University
Worcester, MA 01610-1477
U.S.A.

Phone: 1-508-793-7692
Fax: 1-508-421-3715
Email: gmaschler@clarku.edu
Web: <http://math.clarku.edu/~gmaschler>

ACADEMIC APPOINTMENTS (assistant professor)

Clark University, 2009-present.
Emory University, 2005-2008.
University of Toronto, 2000-2005.

VISITING AND RESEARCH POSTS

Clark University, 2008-2009.
Max Planck Institute in Bonn, 2000 (visiting fellowship).
Ohio State University, Fall 1999.
Landau Center, Institute of Mathematics,
Hebrew University of Jerusalem, 1997-1999 (post-doctoral fellowship).

EDUCATION

Ph.D: State University of New York at Stony Brook, 1997.
B.S.: Hebrew University of Jerusalem, 1987.
graduate studies in Mathematics and Physics: Hebrew University of Jerusalem
and Cornell University, 1987-1989.

DOCTORAL THESIS

Distinguished Kähler metrics and equivariant cohomological invariants.
Thesis advisor: Claude LeBrun

RESEARCH INTERESTS

Complex Differential Geometry.
Special Structures on Manifolds.

GRANTS AND AWARDS

NSERC research grant, Canada, 2001-2003.
PTR merit award, University of Toronto, 2001-2003.

PUBLICATIONS

Articles

The eta invariant in the doubly Kählerian conformally compact Einstein case,
to appear in Math. Z., DOI 10.1007/s00209-011-0903-x.

Generalizations of Kähler-Ricci solitons on projective bundles (with C. W. Tønnesen-Friedman),
Math. Scand. 108 (2011), 161–176.

Conformally Kähler base metrics for Einstein warped products,
Differential Geom. Appl. 29 (2011), 85–92.

Special Kähler-Ricci potentials and Ricci solitons,
Ann. Global Anal. Geom. 34 (2008), 367–380.

Special Kähler-Ricci potentials on compact Kähler manifolds (with A. Derdzinski),
J. Reine Angew. Math. 593 (2006), 73–116.

A moduli curve for compact conformally-Einstein Kähler manifolds (with A. Derdzinski),
Compositio Math. 141 (2005), 1029–1080.

Local classification of conformally-Einstein Kähler metrics in higher dimensions (with A. Derdzinski),
Proc. London Math. Soc. 87 (2003), 779–819.

Central Kähler metrics with non-constant central curvature (with A. D. Hwang),
Trans. Amer. Math. Soc. 355 (2003), 2183–2203.

Central Kähler metrics, Trans. Amer. Math. Soc. 355 (2003), 2161–2182.

Metric pairs and the Futaki character, Int. J. Math. 13 (2002), 1–9.

Conference Proceedings

Uniqueness of Einstein metrics conformal to extremal Kähler metrics – a computer assisted approach,
Special metrics and supersymmetry, 132–143,
AIP Conf. Proc., 1093, Amer. Inst. Phys., Melville, NY, 2009.

Thesis

Distinguished Kähler metrics and equivariant cohomological invariants,
Thesis (Ph.D.)-State University of New York at Stony Brook, 1997, 135 pp.
ISBN: 978-0591-57692-4, ProQuest LLC, Thesis.

ARTICLE UNDER REVIEW

Scalar curvature and holomorphy potentials, arXiv:0804.4671.

PLENARY CONFERENCE LECTURES

Southeast Geometry Seminar XI, Georgia Institute of Technology, Atlanta, USA, 5/2007.

Short Program in Riemannian Geometry, Centre de Recherches Mathématiques, Montreal, Canada, 6–7/2004.

Midwest Several Complex Variables Meeting, London, Canada, 4/2004.

Differential Geometry in Tokyo/Tsukuba, Japan, 12/2003.

OTHER CONFERENCE LECTURES

Special Session on Geometric and Topological Problems in Curvature,
2011 Spring Eastern Section Meeting of the AMS, Worcester, U.S.A., 4/2011.

Special Session on Symplectic, Contact, and Complex Structures on Manifolds,
2009 Fall Eastern Section Meeting of the AMS, University Park, U.S.A., 10/2009.

Special Session on Riemannian and Lorentzian Geometries, 2008 Fall Eastern Section Meeting of the AMS,
Middletown, U.S.A., 10/2008.

International Workshop on Geometry and Physics: Special Metrics and Supersymmetry, Bilbao, Spain, 5/2008.

Geometric Structures on Manifolds, 2007 Fall Western Section of the AMS, Albuquerque, U.S.A., 10/2007.

Midwest Geometry Conference, Iowa City, U.S.A., 5/2007.
Differential Geometry section, Seventh Joint Meeting of the SMM and the AMS, Zacatecas, México, 5/2007.
Geometry of Riemannian manifolds with additional structures, AMS Sectional Meeting, Miami, U.S.A., 4/2006.
Special Geometries in Mathematical Physics, Workshop, Kühlungsborn, Germany, 3/2006.
Interactions in Riemannian Geometry, Fall Western Section of the AMS, Albuquerque, U.S.A., 10/2004.
Geometric Structures on Manifolds, Special Session, annual meeting of the AMS, Phoenix, U.S.A., 1/2004.
International Conference on Differential Geometry and Quantum Physics, Berlin, Germany, 3/2000.

SEMINARS AND COLLOQUIA

Geometry Seminar, Northeastern University, U.S.A., 3/2010.
Séminaire Besse, École Polytechnique, France, 6/2008.
Differential Geometry Seminar, University of Irvine, U.S.A., 5/2007.
University of Auckland, New Zealand, 1/2007.
Analysis Seminar, Georgia State University, U.S.A., 2/2006.
Colloquium, Emory University, U.S.A., 2/2005.
Analysis and Geometry Seminar, Northeastern University, U.S.A., 12/2004.
Geometry and Topology Seminar, University of Waterloo, Canada, 2/2004.
CIRGET Differential Geometry and Topology Seminar, Université du Québec à Montréal, Canada, 1/2004.
Colloquium, Instituto de Física y Matemáticas, Universidad Michoacana, Mexico, 8/2003.
Symplectic Geometry Seminar, University of Toronto, Canada, 4/2003.
Geometry Seminar, Stanford University, U.S.A., 3/2003.
Geometry and Topology Seminar, McMaster University, Canada, 1/2003.
Symplectic Geometry Seminar, University of Toronto, Canada, 3/2002.
CIRGET Differential Geometry and Topology Seminar, Université du Québec à Montréal, Canada, 3/2001.
Symplectic Geometry Seminar, University of Toronto, Canada, 1/2001.
M.P.I.-Oberseminar, Max Planck Institute in Bonn, Germany, 8/2000.
Analysis and Geometry Seminar, Ohio State University, U.S.A., 10/1999.
University of Aarhus, Denmark (two lectures), 5/1999.
Sfb 288, Technische Universität Berlin, Germany, 5/1999.
Humboldt Universität zu Berlin, Germany (two lectures), 4/1999.
Technion and University of Haifa joint Geometry and Topology Seminar, Israel, 3/1999.
Several Complex Variables Seminar, University of Toronto, Canada, 2/1999.
Landau Center Special Lecture, Hebrew University, Israel, 11/1998.
Jerusalem Topology and Geometry Seminar, Hebrew University, Israel, 2/1998.

GRADUATE AND UNDERGRADUATE LECTURES

Undergraduate Lecture: Union College, New York, 3/2007.
Graduate Lecture: Instituto de Física y Matemáticas, Universidad Michoacana, Morelia, Mexico, 8/2003.

RESEARCH WORKSHOPS AND CONFERENCES – INVITED PARTICIPATION

Complex and Riemannian Geometry, Extremal metrics : evolution equations and stability, CIRM, Marseille, France, 2/2011

Shanks workshop, Kähler and Differential Geometry, Vanderbilt University, Nashville, Tennessee, 9/2010.

Extremal Kaehler metrics, International Research Station for Mathematical Innovation and Discovery, Banff, Canada, 6-7/2009.

Extremal Kähler metrics and stability, ICMS Conference, Edinburgh, U.K., 7/2006.

XIIIth Southern California Geometric Analysis Seminar, Irvine, California, 1/2006.

Moment Maps in various Geometries, International Research Station for Mathematical Innovation and Discovery, Banff, Canada, 5/2005.

Conference on Differential Geometry in honour of Paul Gauduchon, École Polytechnique, Palaiseau, France, 5/2005.

Midwest Geometry Conference, Columbus, Ohio, U.S.A., 4-5/2005.

Conformal Geometry, International Research Station for Mathematical Innovation and Discovery, Banff, Canada, 7-8/2004.

Von Neumann Symposium on Complex Geometry, Calibrations, and Special Holonomy, Mathematical Sciences Research Institute, Berkeley, U.S.A., 8/2003.

TEACHING AND CURRICULUM DEVELOPMENT

Normal course load at Clark University: 5 courses a year (received reduction to 4 in one year).

Graduate courses

Functional Analysis, Spring 2006.

Differential Geometry, Fall 2006 and Spring 2007.

Complex Manifolds, Spring 2002.

General Relativity (also advanced undergraduate), Spring 2004.

Undergraduate courses

Advanced level

Algebra I,II, Fall 2003, Spring 2004 (second year).

Topology, Spring 2010, (second and third year).

Modern Analysis, Spring 2009, (second year).

Introduction to Analysis, Fall 2008-10, (second year).

Differential Geometry, Spring 2007 (third year).

Intermediate level

Complex Variables, Fall 2000, Fall 2001 (third year).

Groups and Symmetries, Fall 2002 (third year).

Introduction to Real Analysis, Spring 2005 (third year).

Introduction to Ordinary Differential Equations, Spring 2003 and Fall 2007, included use of symbolic and graphing software facilities (second year).

Calculus!, Fall 2000-Spring 2001 (first year).

Fundamental level or Engineering course

Diving into Research: Geometry, Fall 2009 and Spring 2010.

Calculus Fall 2008-9, Spring 2010, Fall 2010, Spring 2011, (first year) - in part using educational software.

Calculus II, Multivariable Calculus (both with similar content),
Fall 2001-Spring 2002, Fall 2004-Spring 2005,
Fall 2006, Fall 2007, Spring 2008, Spring 2010, Spring 2011,
included use of educational software (second year).

Linear Algebra I, Spring 2003 (second year).

Calculus and Differential Equations, Fall 2003, (second year).

Linear Algebra, Fall 2002 and Spring 2006 (first year).

Calculus 2, Spring 2001 and Fall 2005 (first year).

Directed study (reading) courses

Differential Geometry, Summer 2010, Spring 2011 (third, fourth year).

Differential Topology, Fall 2010 (third year).

PROFESSIONAL ACTIVITIES AND SERVICE

Departmental webpage committee, 2011-2012.

Calculus reassessment committee, 2011-2012.

Advanced courses reassessment committee, 2011-2012.

Statistics search hiring committee member, Clark University, 2009-2010.

Applied probability search hiring committee member, Clark University, 2010-2011.

Faculty Work Task Force member, Clark University, 2010-2011.

Undergraduate board nominee, fall 2009, Clark University.

Undergraduate board nominee, spring 2010, Clark University.

CETL steering committee member, Fall 2011 – Spring 2014, Clark University.

Department representative five open house/academic fair events, including Traina Day, Clark University, 2009, 2010, 2011.

Department representative, major fair, Clark University, 2010.

Tenure track faculty orientation participant, Clark University, 2009-2010.

Annual LEEP symposia participant, Clark University, 5/2011.

Departmental computer lab administrator, Clark University 2011-2012.

Referee for three journals.

Coordinator: Emory Analysis and Differential Geometry Seminar, 2005-2007.

Coordinator: Jerusalem Topology and Geometry Seminar, 1998.

Co-organizer: Southeast Geometry Seminar X, XII, Atlanta, 12/2006, 12/2007.

Administration of a graduate level oral exam in General Relativity, Toronto, Spring 2004.