

CURRICULUM VITAE

MUSTAFA KALAFAT

Department of Mathematics
State University of New York at Stony Brook
Stony Brook , 11794 , NY , USA
kalafat@math.sunysb.edu

Office Phone : 1 631 889 3318
Home Phone : 1 631 689 8048
Fax : 1 631 632 7631

<http://www.math.sunysb.edu/~kalafat/>

PERSONAL INFORMATION

- **Date of Birth** : November 14 , 1978
- **Citizenship** : Turkish

EDUCATION

- **2000-Present** : *Ph.D. in Mathematics , May 2007 (expected)* , State University of New York at Stony Brook, USA. Supervised by Professor Claude LeBrun
- **1996-2000** : *B.Sc. in Mathematics* , Middle East Technical University , Türkiye. Completing the 4 year Undergraduate Program successfully in 3.5 years
- **1993-1996** : *Diploma* , İzmir Science High School , Türkiye. Science High School admits 96 students each year, chosen among the top 100 scoring students on a nationwide examination given by the Government

RESEARCH INTERESTS

- Differential Geometry of 4-Manifolds , Complex Algebraic Geometry
- *In particular* : Self-dual metrics on 4-manifolds , Kähler Manifolds , Geometric Invariant Theory for Toric Varieties , Twistor Theory

PUBLICATIONS & PREPRINTS

- *Scalar Curvature and Connected Sums Of Self-Dual 4-Manifolds*, available at Arxiv math.DG/0611769
- *Geometric Invariant Theory and Einstein-Weyl Geometry*, available at Arxiv math.AG/0611771
- *Deformations of Scalar-Flat Anti-Self-Dual metrics and Quotients of Enriques Surfaces*, To appear in the Turkish Journal of Mathematics , May 2007

TALKS GIVEN

- The Jones Polynomial of a Knot, StonyBrook Graduate Student Seminar Spring-01
- Stein Manifolds and Exotic Structures on \mathbb{R}^4 , StonyBrook Graduate Student Seminar 13-Dec-02
- Contact Geometry and the Classification of Legendrian/Transversal Knots, a Survey, Middle East Technical University Turkey, Geometry-Topology Seminar 22-May-02
- Scalar Flat Kahler Manifolds, StonyBrook Graduate Student Seminar 03-Mar-04
- Self Dual Riemannian 4-Manifolds and Their Twistor Spaces, Middle East Technical University Turkey, Geometry-Topology Seminar 27-Dec-04
- Twistor Spaces of Connected Sum of Projective Planes, Northeastern University Mathematics Department Boston MA , Graduate Student Seminar 22-Mar-05
- Scalar Curvature and Connected Sums Of Self-Dual 4-Manifolds, International Conference on Global Differential Geometry, Münster, Germany 18-Aug-06

- Scalar Curvature and Connected Sums Of Self-Dual 4-Manifolds, ODTÜ-Bilkent Algebraic Geometry Seminar, ODTÜ, Ankara 29-Dec-07

CONFERENCES AND WORKSHOPS

- Around Dynamics, Conference in Honor of the 70th Birthday of John Milnor, Stony Brook Mar-01
- Summer School , SMI , Perugia-Italy Aug-01
- Ahlfors-Bers Colloquium , University of Connecticut at Storrs Oct-01
- Holomorphic Curves and Low Dimensional Topology, IAS, Princeton Mar-02
- Gökova Geometry-Topology Conference Turkey May-02
- Einstein Chair Conference in honor of Dennis Sullivan,CUNY Graduate Center NY 20-21 Sep-02
- Current Developments in Mathematics, Harvard University, Boston Nov 15-17, 2002
- AMS Meeting at Courant Institute NY, Special Session on Contact and Symplectic Geometry Apr-03
- Ricci Flow and the Geometrization of 3-Manifolds, Simons Lectures by Grigory Perelman, SUNY - Stony Brook NY Apr 21-May 2-03
- Gökova Geometry-Topology Conference Turkey May-03
- Gökova Geometry-Topology Conference Turkey May-04
- Summer School on Kahler Geometry and Symmetric Spaces, SMI , Cortona-Italy 15-30 Aug-04
- Gökova Geometry-Topology Conference Turkey May-05
- Summer School on Arithmetic and Geometry Around Hypergeometric Functions, Galatasaray University, İstanbul 13-25 Jun-05
- Conference in Honor of the 60th Birthday of John Morgan, Columbia University NY Apr 30-May 5-06
- Gökova Geometry-Topology Conference Turkey May-06
- Conference on Global Differential Geometry, Münster, Germany 14-19th Aug-06
- Geometry Conference in honor of the 60th Birthday of Nigel Hitchin, Madrid 4-8 Sep-06

TEACHING EXPERIENCE AT STONY BROOK (SELECTED)

- MAT 203 *Multivariable Calculus* , Instructor , Coordinator Fall 2004
- MAT 211 *Linear Algebra* , Instructor , Coordinator Spring 2005
- MAT 518 *Seminar on the Uses of Mathematics (Algorithms & Data Structures) Graduate course for Secondary School Teachers* , Instructor , Coordinator Summer 2005
- MAT 132 *Calculus II , Integral Calculus & Differential Equations*, Instructor, Coordinator Summer 2006
- MAT 126 *Calculus B , Integral Calculus* , Instructor Fall 2006

AWARDS & ACHIEVEMENTS

- Awarded by distinction due to the success in the Mathematics Competition of İSHS 1993
- METU , Summer School of Informatics(Computer) Olympiads.TÜBİTAK 1994
- ÜRGÜP , Summer School of Informatics(Computer) Olympiads.TÜBİTAK 1995
- Most successfully entering student to the Department of Mathematics , METU 1996
- TÜBİTAK Turkish Science and Research Council Fellowship for 4 Years of Undergraduate Studies 1996

- METU Mathematics Society, Council of administration prime member, Vice Chair in 98 1996-98
- Turkish Mathematics Competition of High Schools , organizing comitee.
Head of the problem preparation comitee 1997
- Most successful student of the Term : Fall 96, Spring 98, Fall 98
- Honor Degrees : Fall 96, Spring 97, Fall 97, Spring 98, Fall 98, Fall 99
- BSc of Science , Department of Mathematics, METU Feb-2000
- Graduate Student, Teaching Assistant, METU Feb-2000
- Graduate Student in PhD Program, Teaching Assistant, SUNY-StonyBrook Aug-2000
- Passed the written examination in PhD Program, SUNY-StonyBrook Aug-2001
- Passed the oral examination in PhD Program, SUNY-StonyBrook Dec-2003
- Visiting fellowship at the IHES France, one month 2007

COMPUTERS

- *Pascal* and *C* Programming at advanced level
- *Unix* and *Latex* knowledge at advanced level
- Basic *HTML* knowledge

MEMBERSHIPS

- Turkish American Scientists and Scholars Association (TASSA)
- American Mathematical Society

REFERENCES

- PROFESSOR CLAUDE LEBRUN
State University of New York at Stony Brook
e-mail: claudem@math.sunysb.edu
- PROFESSOR BLAINE LAWSON
State University of New York at Stony Brook
e-mail: blainel@math.sunysb.edu
- PROFESSOR DUSA MCDUFF
State University of New York at Stony Brook
e-mail: dusam@math.sunysb.edu
- ASSOCIATE PROFESSOR JUSTIN SAWON
Colorado State University
e-mail: sawon@math.colostate.edu
- PROFESSOR BERNARD MASKIT (TEACHING)
Director of the Master's Program in Mathematics Education
State University of New York at Stony Brook
e-mail: bernies@math.sunysb.edu