MASSIMILIANO PONTECORVO

CURRICULUM VITAE

* STUDIES *

Ph.D. August 1989. State University of New York at Stony Brook.
Advisor: Professor Claude LeBrun.
Master of Arts. May 1987. SUNY at Stony Brook.
Bachelor degree. March 1983. Univ. di Roma ``La Sapienza''.

* JOBS *

Since 2005. Full Professor in Geometry, Dip. di Matematica, Univ. Roma Tre.
1994 - 2005. Associate Professor in Geometry, Dip. di Matematica, Univ. Roma Tre.
1993 - 1994. Ass. Prof. in Geometry, Dip. di Matematica, Univ. ``Federico II'', Napoli.
1990 - 1993 Assistant Professor in Geometry, Univ. di Bologna.
1989 - 1990. Post-Doctor at SISSA, Trieste

* RESEARCH INTERESTS *

Differential and Riemannian Geometry. Complex Geometry. Self-dual
metrics on four-dimension. Hermitian Geometry of complex surfaces.
Quaternionic Geometry. Twistor theory. Conformally-flat manifolds. Bi-Hermitian
metrics, generalized K"ahler Geometry.

* RESEARCH PROJECTS *

2013-- to present. Scientific Coordinator of Research Unit - PRIN: Varietà reali e
complesse: geometria, topologia e analisi armonica.

2003-2005 Ministry of Foreign Affairs, Scientific Ressearch Project Itallia-Mexico among
the Mathematics Departments of Roma Tre, Cuernavaca and Morelia.

2000-2004 Italian Coordinator of research Project EDGE (European Differential
Geometry Endeavour) of Research Training Networks, funded through the Fifth
Framework Improving Human Potential Programme of the European Community.

* RESEARCH VISITS *

July 2013. Mathematical Sciences Center, Tsinghua University, Beijin.
July 2012 and 2013. Math. Dept. Osaka University, Japan.
October - November 2011. Simons Center for Geometry & Physics. State University of
New York at Stony Brook.
August 2011 and December 2008. Osaka University, Japan.
June 2008. Univ. Quebec at Montreal, Canada.

January 2007, 2006, 2005. Centro di Matematica "De Giorgi", Pisa
November 2006. Math. Dept. University of Arkansas at Faytteville.
June 2006. Humboldt Universit"at, Berlin.
January 2004, November 2002. Ist. de Matematica Cuernavaca, Messico.
November 1999, 1995. Schroendiger Institute, Vienna.
July 1998. Int. Center Math. Sc. Edinburgh.
August 1995. Aarhus, Danimarca.
April 1995. Centre de Recerca Matematica, Barcelona.
February 1995. Ecole Polytechnique, Parigi.
June 1994, 1990. Dip. Matematica Univ. di Odense.
October 1993. Bulgarian Accademy of Sciences, Sofia.
August 1992. Univ. of California at Riverside, USA.

* RECENT TALKS *

October 2016 Marseille, France. Colloquium talk.
August 2016 Zlatibor, Serbia. XIX Geometrical Seminar. Invited, plenary talk.
August 2016 Sofia, Bulgaria. "Interactions in Geometry". Invited talk.
June 2016 "Complex and Symplectic Geometry". Cortona, Italy. Invited talk.
April 2016 "Special Hermitian metrics on non-Kähler manifold". Firenze, Italy. Invited talk.
March 2016 "The 4th Workshop "Complex Geometry and Lie Groups" at Nara, Japan. Invited Talk.
September 2014 "International Conference on Differential Geometry for 150 years of Bucharest University". Bucharest, Romania. Invited Talk.
July 2014 "Hayama Symposium on Complex Analysis in Several Variables XVII". Hayama, Japan. Invited talk.
June 2014 "Complex Geometry and Lie Groups". Torino. Invited talk.
September 2013 "The 11th Int. Workshop on Differential Geometry and Applications. Ploiesti, Romania. Invited talk.
August 2013 "The 8th Pacific Rim Complex Geometry Conference". Dalian, China. Invited talk.
July 2013. Invited to give a talk at Tsinghua University, Beijin China, Mathematical Sciences Center. "Bi-Hermitian metrics on Kato Surfaces.
February 2013 "Workshop: Real and complex manifolds: geometry, topology and harmonic analysis". SNS Pisa. Talk:"On the geometry of complex surfaces."
January 2013 "Geometría Compleja, Sistemas Dinámicos y Teoría de Números: Celebrando los 70 años de Alberto Verjovsky". Cuernavaca, Mexico.
Talk: "Locally conformally K"ahler surfaces".
September 2012 "XVII Geometrical seminar" Zlatibor, Serbia.
Talk: "On a question of Vaisman concerning compact complex surfaces".
Juky 2012 "Encontro de Geometria Brasil-Italia". Salvador de Bahia, Brasil.
Talk: "On a question of Vaisman concerning compact complex surfaces".

* ORGANIZED CONFERENCES *

July 2016 – Montreal – "Conference on Dfferential Geoemtry".
Settember 2014 - Trieste, "Complex Geometry, Analysis and Foliations". Scientific Committee
Settember 2014 - Villasimius, "New trends in Differential Geometry 2014".

September 2011 - L'Aquila, "New trends in Differential Geometry". Scientific Committee.
June 2009 - Roma, INdAM workshop: "Kahler and Sasakian Geometry".
September 2005 - Roma, "Symmetry in Geometry and Physics".
January 2003 - Scuola Normale di Pisa."Edge midterm review meeting".
June 2000 - Cortona. INdAM "Workshop on holomorphic dynamic and geometry".
September 1999 - Roma. "Second Meeting on Quaternionic Structures in Math and Physics".
September 1997 - Bari. "Nuovi contributi Italiani alla Geometria Differenziale".
September 1994. - Trieste, SISSA. "Meeting on Quaternionic Structures in Math & Physics".

Papers:

Pontecorvo M. On bi-Hermitian surfaces in "Complex and Symplectic Geometry" -- Springer (In print).

Fujiki A., Pontecorvo M. Bi-Hermitian metrics on Kato surfaces. (Submitted).

Fujiki A., Pontecorvo M (2015). Numerically anticanonical divisors on Kato surfaces. JOURNAL OF GEOMETRY AND PHYSICS, vol. 91, 117-130, ISSN: 0393-0440, doi: 10.1016/j.geomphys.2015.01.001

Pontecorvo M (2014). On a question of Vaisman concerning complex surfaces. ANNALI DI MATEMATICA PURA ED APPLICATA, vol. 193, 1283-1293, ISSN: 1618-1891, doi: 10.1007/s10231-013-0328-8

Fujiki A, Pontecorvo M (2014). Twistors and bi_hermitian surfaces of non-K\"ahler type. SYMMETRY, INTEGRABILITY AND GEOMETRY: METHODS AND APPLICATIONS, vol. 10, paper 042, 13 pp. ISSN: 1815-0659

A. Fujiki, M. Pontecorvo (2010). Anti-self-dual bihermitian structures on Inoue surfaces. JOURNAL OF DIFFERENTIAL GEOMETRY, vol. 85, p. 15-71, ISSN: 0022-040X

A. Fujiki, M. Pontecorvo (2010). Non-upper-semicontinuity of algebraic dimension for families of compact complex manifolds. MATHEMATISCHE ANNALEN, vol. 348, p. 593-599, ISSN: 0025-5831, doi: 10.1007/s00208-010-0492-8

L. David, M. Pontecorvo (2009). A characterization of quaternionic projective space by the conformal-Killing equation.. JOURNAL OF THE LONDON MATHEMATICAL SOCIETY, vol. 80, p. 326-340, ISSN: 0024-6107, doi: 10.1112/jlms/jdp023

M. Pontecorvo. ``Bihermitian and locally conformally K\"ahler surfaces"
   Lecture note series in Mathematics, Vol. 9, 172-192, Osaka University. 2008.

A.Fujiki, M. Pontecorvo. ``On Hermitian geometry of complex surfaces''.
  Complex, contact and symmetric manifolds, 153—163, Progr. Math., 234,
  Birkh\"auser Boston, Boston, MA, 2005.

D. Alekseevsky, S. Marchiafava, M. Pontecorvo. ``Spectral properties of the twistor
fibration of a quaternion K\"ahler manifold''. Journal de Math\'ematiques Pures et
Appliqu\'ees. vol. 79, 95-110 (2000).

D. Alekseevsky, S. Marchiafava, M. Pontecorvo.
  ``Some geometric aspects of compatible complex structures on a
  quaternionic manifold''. Differential Geometry and its Applications.
  Proc. Satellite Conf. Int. Congress of Math. Berlin, 1999, 1-11.

D. Alekseevsky, S. Marchiafava, M. Pontecorvo.
  ``Compatible complex structures on almost quaternionic manifolds''.
  Trans. Amer. Math. Soc. vol 351, 997--1014 (1999).

D. Alekseevsky, S. Marchiafava, M. Pontecorvo.
  `` Compatible almost complex structures on quaternion K\"ahler manifolds''.
  Ann. Global Anal. Geom. vol. 16, 419--444 (1998).

M. Pontecorvo.
  ``Complex structures on Riemannian four-manifolds''.
  Math. Ann., vol. 309, 159-177 (1997).

M. Pontecorvo.
  ``Some relations between complex and quaternionic structures''.
  Rend. Circ. Mat. Palermo (2) Suppl. No. 49, 219--227 (1997).

C. Le Brun, Jongsu Kim, M. Pontecorvo.
  ``Scalar-flat K\"ahler surfaces of all genera''.
  J. Reine Angew. Math., vol. 489, 69-95 (1997).

M. Pontecorvo.
  ``On the complex geometry of twistor spaces''.
   Seminario di Geometria 1994-1995. Universit\'a di Bologna.
  S. Coen, editore. 195-216 (1996).

M. Pontecorvo.
  ``On the existence of scalar-flat K\"ahler surfaces''.
  Rendiconti di Matematica, serie VII, vol. 15, 621-643 (1995).

Jongsu Kim, M. Pontecorvo.
  ``A new way of constructing scalar-flat K\"ahler surfaces''.
  Journal of Dif\-ferential Geometry, vol. 41, 449-477 (1995).

M. Pontecorvo.
  ``Complex Structures on Quaternionic Manifolds''.
  Dif\-ferential Geometry and its Applications
   vol. 4, 163-178 (1994).

M. Pontecorvo.
``Uniformization of Conformally-Flat Hermitian Surfaces.''
 Differential Geometry and its Applications}
 vol. 2, 295-305 (1992).

M. Pontecorvo.
 ``On Twistor Spaces of Anti-Self-Dual Hermitian Surfaces''.
 Transactions of the American Mathematical Society,
  vol. 331, 653-661 (1992).

M. Pontecorvo.
 ``Hermitian Surfaces and a Twistor Space of Algebraic Dimension 2''.
 Proceedings of the American Mathematical Society,
  vol. 113, 177-186 (1991).

M. Pontecorvo.
 ``Algebraic Dimension of Twistor Spaces and Scalar Curvature of
  Anti-Self-Dual Metrics.''
  Mathematische Annalen, vol. 291, 113-122 (1991).