

Nefton Pali's CURRICULUM VITAE

PERSONAL INFORMATION

Date of birth: 12/june/1976

Nationality: Italian

EDUCATION

2015 Habilitation (HDR), University of Paris-Sud, Orsay, France.

2004 Phd, Institut Fourier, University Joseph Fourier, Grenoble, France.

2001 Master, Institut Fourier, University Joseph Fourier, Grenoble, France.

2000 Graduation, University of Rome 1, Italy.

1996 Bachelor, Institut Galileo Galilei, Rome, Italy.

CURRENT POSITION

2007-2016 CNRS, CR 1 researcher, Department of Mathematics, University of Paris-Sud, Orsay, France.

FELLOWSHIPS

2006-2007 Marie Curie OIF Post-doc, Institut Fourier, University Joseph Fourier, Grenoble, France

2004-2006 Marie Curie OIF Post-doc, Mathematics Department, Princeton University, USA

INSTITUTIONAL RESPONSIBILITIES

2016,

- Referee and member of the jury for the phd thesis of Hassan Jolanny (Gang Tian's PHD student), University of Lille 1, France.
- Co-organiser of the conference in honor of Jean-Pierre Demailly on the occasion of his 60th birthday anniversary, June 6-9, 2017.
- Co-organiser of the workshop "Dynamical Geometric Analysis in Orsay" June 27-30, 2017, with the support of the Sino-French Research Programs in Mathematics, SFRPM

2015-2016, Advisor of the PHD student Francois Delgove, Department of Mathematics, University of Paris-Sud, Orsay, France.

2014-2015, Advisor of the under graduated student Francois Delgove, Department of Mathematics, University of Paris-Sud, Orsay, France.

2013-2016, Member of the Faculty Committee, Department of Mathematics, University of Paris-Sud, Orsay, France.

2013-2014, Member of Maitre de Conférence (French associated professor position) Hiring Committee, Department of Mathematics, University of Paris-Sud, Orsay,

France.

2010-2015, Referee for Annales de l'Institut Fourier, Bulletin of the Brazilian Mathematical Society, Comptes Rendus de l'Académie des sciences, JAMS, JEMS, Mathematische Zeitschrift.

2005-2006, Organizer of the Differential Geometry and Geometric Analysis Seminar, Mathematics Department, Princeton University, USA

Prices and distinctions

2016, Co-animator with Fanny Cassel and Barbara Schapira, over the coordination of François Labourie, of the project "Young Geometers", with the support of a price attributed to François Labourie by the Foundation Louis D. on the proposition of the French Academy of Science.

MAJOR COLLABORATIONS

Jean-Pierre DEMAILLY, Complex Monge-Ampère Equations, Institut Fourier, University Joseph Fourier, Grenoble, France

INVITED PRESENTATIONS TO INTERNATIONAL CONFERENCES AND SEMINARS

17-20/05/2016–: Alkage Workshop, Institut Fourier, Grenoble, (Conference web-site: <https://workshop-alkage.sciencesconf.org/resource/page/id/3>)

16-20/06/2015–: Seminars at School of Mathematical Science, USTC, Hefei, China.

31/05/2015–: Conference "Complex analysis and geometry", Levico, Italy. (Conference web-site: <http://www.science.unitn.it/cirm/listComplex2015.html>).

18/05/2015–: Conference "Recent Advances in Kähler Geometry" in conjunction with the 30th annual Shanks Lecture, Nashville, USA. (Conference web-site: <http://www.math.vanderbilt.edu/kahlergeometry/speakers.php>).

08/05/2015–: Seminar at the "Differential Geometry and Geometric Analysis Seminar" Princeton University Mathematics Department, USA. (Seminar web site: <https://www.math.princeton.edu/events/seminars/differential-geometry-geometric-analysis-seminar/variational-stability-kähler-ricci>).

05/12/2014–: Seminar "Géométrie Complexe", Institut de Mathématiques de Toulouse. (Seminar web site: <http://www.math.univ-toulouse.fr/spip.php?evenement706>)

02/06/2013–: Conference "Complex analysis and geometry", Levico, Italy. (Conference web-site: <http://www.science.unitn.it/cirm/listComplex2013.html>)

30/11/2012–: Conference IHP "Conformal and Kähler Geometry", Paris, France.
(Conference web-site: [http://www.ihp.fr/fr/Seminar/Nefton PALI/30/11/2012](http://www.ihp.fr/fr/Seminar/Nefton%20PALI/30/11/2012)).

13/06/2011–: Conference "Complex analysis and geometry", Levico, Italy.

28/06/2009–: Conference "Extremal Kähler metrics", Banff center, Canada.
(<https://www.birs.ca/workshops/2009/09w5027/Programme09w5027.pdf>).

01/06/2009–: Conference "Complex analysis and geometry", Levico, Italy.

06-17/04/2009–: Colloquium CICTS Program on Differential Geometric Methods in Algebraic Geometry, Mumbai, India

02/06/2008–: Conference "Ricci curvature and complex geometry"
IHP, Paris, France. (<https://www-fourier.ujf-grenoble.fr/~besson/Borel/Workshops/prog-workshop1.pdf>).

22/03/2006–: Seminar at the University of Wisconsin-Madison, USA.

08/12/2005–: Colloquium at University of Stony Brook, USA.

05/11/2005–: Seminar at Princeton University, USA.

26-26/04/2005–: Seminars at the University of Wisconsin-Madison, USA.

19/04/2005–: Seminars at the University of Chicago, USA.

21/10/2004–: Seminar at the University of Provence, CMI, Marseille, France.

14/10/2004–: Seminar at the Center of Mathematics, Paris Center, Jussieu, France.

28/09/2004–: Seminar at the University of Trento, Summer School of Trento, Italy.

16/05/2004–: Seminar at the University of Paris-Sud, Orsay, France.

17/12/2003–: Seminar at the University of Rome "La Sapienza", Department of Mathematics "Guido Castelnuovo", Italy.

15/10/2003–: Seminar at ENS Lyon, UMPA, France.

18/05/2003–: Seminar at the "Institut de Mathématiques de Toulouse".

1 PUBLICATIONS

Publication 1: $\bar{\partial}$ -Coherent Sheaves over Complex Manifolds, *Mathematische Annalen*. Vol 336, (2006), Nr 3, 571-615.

Publication 2: Plurisubharmonic functions and positive $(1, 1)$ -currents over almost complex manifolds, *Manuscripta Mathematica*, volume 118, (2005) issue 3, pp. 311 - 337.

Publication 3: The Chern Connection of the Tangent Bundle of Almost Complex Manifolds, *New-York Journal of Mathematics*. 11, (2005) 597 - 634.

Publication 4: A consequence of a lower bound of the K-energy, *International Mathematics Research Notices*, (2005), no. 50, 3081 - 3090

Publication 5: Characterization of Einstein-Fano manifolds via the Kähler-Ricci flow, *Indiana Univ. Math. J.* 57, (2008), no. 7, 3241-3274.

Publication 6: On the solutions of the Aubin equation and the K -energy of Einstein-Fano manifolds, *Complex Var. Elliptic Equ.* 54, (2009), no. 11, 1019-1054.

Publication 7: (In collaboration with Jean-Pierre Demailly) Degenerate complex Monge-Ampère equations over compact Kähler manifolds. *Internat. J. Math.* 21 (2010), no. 3, 357-405.

Publication 8: On the L^2 -extension of twisted holomorphic sections of singular hermitian line bundles, *Annali di Matematica Pura ed Applicata*, 191 (2011) no. 3, 363-394.

Publication 9: A second variation formula for Perelman's \mathcal{W} -functional along the modified Kähler-Ricci flow, arXiv:1201.0970v1, (2012), *Mathematische Zeitschrift*. 276 (2014), no. 1-2, 173-189.

Publication 10: The total second variation of Perelman's \mathcal{W} -functional, *Calc. Var. Partial Differential Equations* 50 (2014), no. 1-2, 115-144.

Publication 11: The Soliton-Kähler-Ricci flow over Fano manifolds, *New York J. Math.* 20 (2014), 845-919.

Publication 12: Variation formulas for the complex components of the Bakry-Emery-Ricci endomorphism, (2014), *Complex Var. Elliptic Equ.* 60 (2015), no. 5, 635-667.

Publication 13: Variational stability of Kähler-Ricci solitons, *Advances in Mathematics* 290, (2016), 15-35.

Publication 14: The Soliton-Kähler-Ricci flow with variable volume forms, *Complex Manifolds*, Vol 3, Issue 1, (2016), 41-144.

Publication 15: Chern-Ricci invariance along G-geodesics, *Michigan Mathematical Journal*, Volume 66, Number 3, (2017), 611-623.

Publication 16: On complex deformations of Kähler-Ricci solitons, *Kodai Mathematical Journal*, to appear.

Publication 17: Concavity of Perelman's \mathcal{W} -functional over the space of Kähler potentials, *European Journal of Mathematics*, to appear.

Publication 18: Exact Fourier inversion formula over manifolds, *Journal of Pseudo-Differential Operators and Applications*, to appear.

LECTURE NOTES

Lecture notes on the Ein-Popa extension result, arXiv:0904.0842v2. (2009).