

Curriculum Vitae

Alexandra-Iulia Otiman

Personal data

First name: Alexandra-Iulia

Last name: Otiman

Nationality: Romanian

E-mail: alexandra_otiman@yahoo.com

Webpage: <https://sites.google.com/site/alexandraotiman/>

Employment

1st of October 2017 - 30th of September 2018 - Postdoctoral fellow at Max Planck Institut für Mathematik, Bonn, Germany

2014 – present : - research assistant, Institute of Mathematics of the Romanian Academy “Simion Stoilow”

Education

September 2017 - Ph.D. in Mathematics, University of Bucharest

Advisor: Prof. Liviu Ornea

Thesis title: Conformal Geometry on Hermitian and symplectic manifolds

June 2014: M. Sc. in Mathematics (*Cryptography and Theory of Codes* programme)
University of Bucharest

Master thesis: Currents on Kähler manifolds

Adviser: Prof. Liviu Ornea

October 2014: M.Sc at Școala Normală Superioară București (*Fundamental structures and applications in algebra, geometry and topology* programme)

Master thesis: Local isometric immersions of surfaces with constant mean curvature

Adviser: Prof. Sergiu Moroianu

2009 - 2012: - undergraduate student at the Faculty of Mathematics and Computer Science, University of Bucharest, with bachelor thesis “Introduction to Kähler Geometry”

2009 - 2012 : - undergraduate student at the Faculty of History, University of Bucharest, specialization “*International Relations and European Studies*”

2011 - 2012: - preliminary cycle of Școala Normală Superioară București

Research visits:

12th of June - 15th of July 2017 - Bilbao Center of Applied Mathematics, Spain
1st of July - 30th of September 2016 - Erasmus Interchange Programme, University “La Sapienza” Rome, Italy.
13th of January - 14th of February 2016 – visiting student at University of Paris VI, Pierre et Marie Curie, France.

Awards:

2011 - 2012 : University scholarship for scientific research for the topic “*Permutation Polynomials over Finite Fields*”
2007, 2004 : silver medal at the National Mathematics Olympiad
2006, 2005 : bronze medal at the National Mathematics Olympiad

Participations to grants:

2017 : Member of the grant PN-III-P4-ID-PCE-2016-0065, University of Bucharest
2012 - 2014 : Research Assistant in the grant “Quantum invariants in hyperbolic geometry” RU-TE-2011-3-0053, Mathematics Institute of the Romanian Academy

List of published or accepted papers:

1. D. Angella, A. Otiman, N. Tardini, *Cohomologies of locally conformally symplectic manifolds and solvmanifolds*, Annals of Global Analysis and Geometry, 53, no.1 (2018), 67-96.
2. A. Otiman, *Morse-Novikov cohomology of locally conformally Kähler surfaces*, Mathematische Zeitschrift, Vol. 289 (2018), Issue 1-2, 605-628.
3. A. Otiman, M. Stanciu, *Darboux-Weinstein theorem for locally conformally symplectic manifolds*, Journal of Geometry and Physics, 111C (2017), 1-5.
4. A. Otiman, *Locally conformally symplectic bundles* arXiv:1511.00227, to appear in Journal of Symplectic Geometry.
5. A. Otiman, *Currents on locally conformally Kähler manifolds*, Journal of Geometry and Physics, Vol. 86 (2014), 564–570.

Preprints:

6. N. Istrati, A. Otiman, *De Rham and twisted cohomology of Oeljeklaus-Toma manifolds*, arXiv:1711.07847 (submitted)
7. L. Ornea, A. Otiman, *A characterization of compact locally conformally hyperkähler manifolds*, arXiv: 1803.01363 (submitted)

Talks at conferences:

- Complex Geometry and Lie Groups Workshop (June 2018, Florence, Italy)
Cohomology of Oeljeklaus-Toma manifolds
- Lie theory, Geometry and Differential Equations School (October 2017, Marburg, Germany):
Twisted cohomology of LCK manifolds
- Kähler-Einstein metrics Cortona School (May 2017, Italy):
Twisted cohomology of LCS manifolds
- Geometric structures related to Hermitian and almost Hermitian manifolds Workshop (May 2016, Leibniz University of Hanover, Germany):
Morse-Novikov cohomology of LCS manifolds
- Special Hermitian metrics on non-Kähler metrics Workshop, University “Ulisse Dini” (April 2016, Florence, Italy):
New constructions in LCS geometry
- Workshop on almost hermitian geometry (October 2015, Bedlewo, Poland):
Locally conformally symplectic bundles
- Geometry and PDE's Workshop (May 2015, West University of Timisoara, Romania):
Locally conformally symplectic bundles
- Extremal Kähler metrics Cortona School (April 2015, Italy):
Symplectic fibrations
- Geometry and PDE's Workshop (June 2014, West University of Timisoara, Romania)
Currents on locally conformally Kähler manifolds
- Extremal Calabi metrics Cortona School (July 2014, Italy)
Currents on LCK manifolds
- Geometry and PDE's Workshop (May 2013, West University of Timisoara, Romania)
The flux homomorphism

Talks at seminars:

- May 2018, Oberseminar Geometrie, Topologie und Analysis, Universität zu Köln, Germany, *Cohomology of Oeljeklaus-Toma manifolds*
- March 2018, Seminar of Topology, Geometry and Algebra, University of Nantes, France, *Cohomology of Oeljeklaus-Toma manifolds*
- March 2018, Differential Geometry Seminar, Institute of Mathematics of the Romanian Academy, Bucharest, *Cohomology of Oeljeklaus-Toma manifolds*
- February 2018, Oberseminar Differential Geometry, Max Planck Institut, Bonn, *Locally conformally Kähler manifolds and their cohomology*
- October 2017, Oberseminar of Global Analysis, University of Regensburg, Germany
Twisted cohomology of LCK manifolds
- October 2016, Seminar of Differential Geometry, Institute of Mathematics of the Romanian Academy, Bucharest, *Morse-Novikov cohomology of LCK surfaces*

- October 2016, Seminar of Differential Geometry, CMI, Université d'Aix-Marseille, France, *Morse-Novikov cohomology of LCK surfaces*
- May 2016, Seminar of Differential Geometry, Institute of Mathematics of the Romanian Academy, Bucharest, *Morse Theory for closed one-forms*
- February 2016, seminar *Analyse Algébrique* University Paris VI Pierre et Marie Curie, France, *Locally conformally symplectic geometry*
- October 2015, seminar of Differential Geometry, Institute of Mathematics of the Romanian Academy, Bucharest, *Locally conformally symplectic bundles*
- October 2014, seminar of Differential Geometry, Institute of Mathematics of the Romanian Academy, Bucharest, Romania
Currents on locally conformally Kähler manifolds

Research Interests:

Complex Geometry, non-Kähler manifolds, locally conformally Kähler/locally conformally symplectic manifolds.

Teaching:

- Winter semester 2015-2016, 2016-2017: Seminar of Mathematical Logic for first year undergraduate students, Department of Computer Science and Department of Mathematics, University of Bucharest
- Spring semester 2015-2016, 2016-2017 : Seminar of Logical Programming for second year undergraduate students, Department of Computer Science, University of Bucharest
- Spring semester 2016-2017: Seminar of Geometry for first year undergraduate students, Department of Computer Science, University of Bucharest

Other activities:

- Co-organizer with D. Angella, S. Calamai, Graziano Gentili, D. Petrecca, N. Tardini, of the SMI course “Conformal Geometry, Cartan connection and locally conformally Kähler structures”, May 13-19, 2018 Cortona, Italy
- Co-organizer with Mihaela Pilca of the “Special Hermitian metrics and symmetries on complex manifolds” Workshop, September 11-14, 2018, University of Regensburg, Germany

Foreign Languages:

- English (Cambridge Certificate in Advanced English)
- German (Zertifikat Deutsch, DAF)