

## Liviu Ornea Curriculum Vitae

### Personal data

Born in Bucharest, Romania, July, 14-th, 1960. Married with Liana since 1984. Two children: Irina, born in 1987; Matei, born in 1989.

### Education

1980-1984 University of Bucharest, Faculty of Mathematics.

1984-1985 Specialization in Algebra-Geometry (Master degree equivalent) at the same University.

### Doctorate

1992 Doctor in Mathematics at the University of Bucharest with the thesis *Geometrical structures on complex manifolds. Locally conformal Kähler structures*.

### Present position

Professor at the Faculty of Mathematics, University of Bucharest (since 2004), with half-position as Senior Researcher I at the Institute of Mathematics "Simion Stoilow" of the Romanian Academy (since 2007).

### Teaching activity

- Courses and tutorials of: Linear algebra and geometry (I-st year), Differential geometry of curves and surfaces (II-nd year), Manifolds and Riemannian geometry (III-rd year), Variational calculus (IV-th year), Complements of Riemannian Geometry (IV-th year), Foundations of geometry (IV-th year), Algebraic and differential topology (master), Complex geometry (master).
- Differential geometry at Perugia Scuola Matematica Interuniversitaria 2016, 2019.
- For current teaching see the page [Teaching - Didactică](#)

### Previous positions

- 1985-1987 Mathematics teacher in High school nr. 6, Tîrgoviste.
- 1987-1990 Mathematician, Institute for Computer Science, Bucharest.
- 1990-1991 Assistant Professor at the Politechnical University, Bucharest.
- 1991-1995 Assistant Professor at the Faculty of Mathematics, University of Bucharest.
- 1995-2001 Senior lecturer at the Faculty of Mathematics, University of Bucharest.
- 2001-2004 Associate professor at the Faculty of Mathematics, University of Bucharest.

### Fields of interest

Differential geometry of Hermitian manifolds, quaternionic structures, contact (Sasakian) structures.

### Mathematical Publications

- Over 70 research papers.

- The item *Hopf manifolds* in the Kluwer Encyclopedia of Mathematics.
  - The monograph *Locally conformal Kähler geometry*, Progress in Mathematics 155, Birkhäuser 1998 (with Sorin Dragomir). Awarded with the "Ghe. Titeica" prize of the Romanian Academy in 1998.
  - The problem book *Differentiable curves and surfaces* (in Romanian), Univ. of Bucharest Publ. House 1995.
  - The textbooks *An introduction to geometry* (in Romanian, with A. Turtoi), Theta Foundation Publ. House, 2000; 2nd ed. 2011; *An introduction to differential geometry* (in Romanian), Theta Foundation Publ. House, 2015.
- For a rather complete list and downloads, please see the page [Publications](#)

### Research in foreign universities and institutes

- 1990, 1 month in Paris 7.
- 1993, 3 months at the Université Libre de Bruxelles.
- 1994, 6 months at "La Sapienza" University in Rome.
- 1996, 10 days at Debrecen University, Hungary.
- 1997, "La Sapienza" University in Rome.
- 1997, 2 months at Dortmund University.
- 1997-1998, 5 months at Paris 6 University.
- 1998, 1 month at "La Sapienza" University in Rome.
- 1998, 2 months in "Max-Planck Institut für Mathematik" Bonn.
- 1999, 2 weeks at Kumamoto University, Japan.
- 1999, 2 months at the "International Centre for Theoretical Physics *Abdus Salam*", Trieste.
- 1999, 2 weeks at the "Erwin Schrödinger International Institute for Mathematical Physics", Vienna.
- 2000, 1 month at "La Sapienza" University in Rome.
- 2000 and 2001, 1 month at Tokyo Metropolitan University.
- 2001, 1 month in Ecole Polytechnique Fédérale de Lausanne.
- 2002, 1 month at "La Sapienza" University in Rome.
- 2002, 2 weeks at the Catholic University, Leuven.
- 2003, 3 months in Ecole Polytechnique, Paris.
- 2003, 1 month at University of Basilicata, Potenza.
- 2003, 1 month at the "Erwin Schrödinger International Institute for Mathematical Physics", Vienna.
- 2003, 2 months at University of New Mexico, Albuquerque.
- 2004, 1 month at Université de Nancy.
- 2004, 1 month in Ecole Polytechnique Fédérale de Lausanne.
- 2004 - 2005, visiting professor at University of New Mexico, Albuquerque.
- 2006, 1 month at "La Sapienza" University in Rome.
- 2006, 1 month in Ecole Polytechnique Fédérale de Lausanne.
- 2006, 1 month in Ecole Polytechnique, Paris.
- 2007, 1 month at Waterloo University, Canada.
- 2008, "Ennio de Giorgi" Institute (Pisa, 2 weeks) and University of Pescara (3 weeks).
- 2008, Ecole Polytechnique, Paris (3 weeks).

- 2009, University of Tokyo, (2 weeks)
- 2009, Moscow Independent University (1 week)
- 2009, Ecole Polytechnique, Paris (1 week)
- 2010, Oberwolfach Institute (2 weeks)
- 2010, Tokyo Institute of Technology (visiting professor, 3 months)
- 2011, University of Cagliari (visiting professor, 1 month)
- 2011, Higher School of Economics, Moscow (visiting researcher, 2 weeks)
- 2012, University of Rome, La Sapienza (visiting researcher, 1 month)
- 2012, Max-Planck-Institut fuer Mathematik, Bonn (2 months)
- 2013, Higher School of Economics, Moscow (visiting researcher, 2 weeks)
- 2014, Higher School of Economics, Moscow (visiting researcher, 4 weeks)
- 2015, Higher School of Economics, Moscow (visiting researcher), 3 weeks)
- 2016, Postech, Pohang (Korea) (visiting researcher), 2 weeks.
- 2017, Univ. Libre de Bruxelles (visiting researcher), 10 days.
- 2017, Higher School of Economics, Moscow (visiting researcher), 2 weeks.
- 2018, University of Houston (visiting researcher), 10 days.
- 2018, University of Firenze (visiting researcher), 2 weeks.
- 2018, IMPA, Rio de Janeiro (visiting researcher), 1 month.
- 2019, IMPA, Rio de Janeiro (visiting researcher), 1 month.
- 2019, Higher School of Economics, Moscow (visiting researcher), 2 weeks.

#### **Lectures given in foreign universities and institutes**

Rome - La Sapienza (1991, 1994, 1998, 2000, 2002, 2003, 2006, 2012), Bruxelles - U.L.B. (1993, 1997, 2002, 2015, 2016, 2017), Leuven (1993, 2002), Lecce (1994), Potenza (1994, 1997, 1998, 2002, 2006), Palermo (1994), Debrecen (1996), Cagliari (1997, 1999, 2000, 2011), Mulhouse, Nice, Angers, Bonn (1998), Paris 7 (1998, 2003), Ochanomizu (Tokio) (1999), ICTP Trieste (1999), ESI Vienna (1999, 2003), Tokyo Metropolitan (1999, 2000, 2001, 2009), EPFL (2001), Brest (2003), New Mexico - Albuquerque (2003, 2004, 2005, 2016), California - Riverside (2003, 2004), Ecole Polytechnique - Paris (2003, 2004), Nancy (2003, 2004), Minnesota - Minneapolis (2005), Miami (2005), Pescara (2006, 2008), Glasgow (2007), Edinburgh (2007), Waterloo (2007), Universite de Quebec a Montreal (2007), Steklov Inst. (2007, 2009), Firenze (2008, 2017, 2018), Parma (2008), Lille (2008), Tokyo Inst. of Technology (2010), Osaka (2010), MPIM Bonn (2012), Hamburg (2012), Marburg (2012), Koeln (2012), HSE Moscow (2013, 2014, 2015, 2017, 2019), Postech (Korea, 2016), NYU (2016), Hannover (2017), Houston (2018), Texas Tech (Lubbock) (2018), IMPA (2018, 2019), Fluminense (Rio) (2018)

#### **Invited speaker (selection)**

- Second international meeting on quaternionic structures in mathematics and physics (Rome, September 1999).
- Perspectives in calibrations and gauge theories (Martina Franca, May 2000).
- Integrable systems in differential geometry (Tokyo, July 2000).
- Differential geometry and applications (Varna, August 2001).
- Geometric mechanics and its applications, MASIE, (Lausanne, July 2004).

- AMS Fall Western Section Meeting (Albuquerque, NM, October 2004).
- Special geometries in mathematics and physics (Kuehlungsborn, March 2006, April 2008).
- 6th Congress of Romanian Mathematicians (Bucharest, June 2007).
- Supersymmetry in complex geometry (Kashiwa-Tokyo, January 2009).
- A harmonic map fest (Cagliari, September 2009).
- Kaehler and related geometries (Nantes, November 2009).
- 5th Pacific rim conference on complex and symplectic geometry (Nagoya, July 2010).
- Non-Kaehler complex geometry (Luminy, February 2011).
- Geometry of Kaehler manifolds, 21-25 May 2012, Laboratoire de Mathématiques Jean Leray, Nantes.
- Geometric structures on Riemannian manifolds, 25-26 June 2015, Bari.
- Special Hermitian metrics on non-Kaehler manifolds, 20-22 April 2016, Florence.
- Complex and symplectic geometry, 12-18 June 2016, Cortona.
- Special metrics and symmetries on complex manifolds, 11-14 September 2018, Regensburg.

## Varia

- Prize "Gheorghe Titeica" of the Romanian Academy in 1998 for the book *Locally conformal Kähler geometry*.
- Reviewer for *Mathematical Reviews* and *Zentralblatt für Mathematik*.
- **Non-mathematical publications:**
  1. Theater reviews and various articles in *Scena, Teatrul Azi, Dilema, Dilema veche, Observator cultural* (weekly column Oct. 2005 - Oct. 2015, May 2017 --), 22, *Ocean, Cuvintul*.
  2. Translations from French:
    1. *Mitul arian (Le mythe arien)*, by Leon Polyakov, EST Publishing House 2003
    2. *Breviarul urii (Le bréviaire de la haine)*, by Leon Polyakov, EST Publishing House, 2004.
    3. *Ura de sine (La haine de soi)*, J.-C. Attias and E. Benbassa eds., EST Publishing House, 2005
    4. *Tata. Inventar (Mon père. Inventaire)*, by Jean-Claude Grumberg, EST Publishing House, 2010.
    5. *Priviri asupra conditiei evreiesti (Regards sur la conditions juive)*, by Gilles Zenou, EST Publishing House, 2010.
    6. *Teorema vie (Théorème vivant)*, by Cédric Villani, Humanitas Publ. House, 2014.
  3. Translations from Italian:
    1. *Timpul imbatrineste in pripa (Il tempo invecchia in fretta)*, by Antonio Tabucchi, Polirom Publishing House, 2010.
    2. *Iubitul nefericit (L'amante infelice)*, by Alberto Moravia, Polirom Publishing House, 2011.
    3. *Matematica zeilor si algoritmii oamenilor (La matematica degli dei e gli algoritmi degli uomini)*, by Paolo Zellini, Humanitas Publ. House, 2018.

4. *Varietati conexe* (Essays, in Romanian), Curtea Veche Publ. House, Bucuresti, 2008.
5. *Bifurcatii* (Essays, in Romanian), Curtea Veche Publ. House, Bucuresti, 2014.
6. *Un matematician la teatru* (Theater critique, in Romanian), Tracus arte Publ. House, Bucuresti 2014.

### **Service**

- 2008-2012 Secretary scientific of Faculty of Mathematics and Informatics
- 2012- Head of Department of Mathematics
- 2013- Scientific Council of the Mathematics Department of "Scoala Normala Superioara - Bucuresti".

### **Membership**

- Society of Mathematical Sciences of Romania
- Ad Astra (association of Romanian researchers, [www.ad-astra.ro](http://www.ad-astra.ro))
- International Association of Theater Critiques, Romanian section.

### **Editorship**

- Bulletin Mathématique de la Société des Sciences Mathématiques de Roumanie.
- Romanian Journal of Pure and Applied Mathematics (Rev. Roum. de Math. Pures et Appl.)
- Mathematical Reports
- Annals of the University of Bucharest (Mathematics series).

### **Spoken languages**

- Romanian, French, English, Italian.

