

# Curriculum Vitae

## Biographical data

**Name:** Ioan Tiberiu Mărcuț  
**Place of birth:** Sibiu, Romania  
**Date of birth:** 24/03/1984  
**Citizenship:** Romanian  
**Website:** <http://www.math.ru.nl/~imarcut/index.htm>  
**E-mail:** i.marcut@math.ru.nl

## Employment

9/2014-present **Assistant Professor (UD)**-tenure track, *Radboud University Nijmegen, Institute for Mathematics, Astrophysics and Particle Physics*  
8/2013-8/2014 **J.L.Doob Research Assistant Professor**, *University of Illinois, at Urbana-Champaign*  
9/2012-8/2013 **Postdoctoral Researcher**, *Utrecht University*  
9/2008-8/2012 **Teaching Assistant (AiO)**, *Utrecht University*

## Education

9/2008-2/2013 **Ph.D.**, *Utrecht University*. Thesis: *Normal Forms in Poisson Geometry*.  
Advisor: Marius Crainic  
9/2007-6/2008 **Master Class:** Quantum Groups, Affine Lie Algebras and their Applications, *Utrecht University*. Research project: *Representations of  $U_q(\widehat{\mathfrak{sl}}_2)$  and the affine Hecke algebra*.  
Advisor: Jasper Stokman  
9/2003-6/2007 **B.Sc.**, *Babeş-Bolyai University, Cluj-Napoca*. Bachelor thesis: *Linear Algebraic Groups*.  
Advisor: Andrei Mărcuș

## Grants and Awards

- **The André Lichnerowicz prize 2014**, for contributions to Poisson Geometry.  
See the *Notices of the AMS*, Nov 2014, p. 1253, or the *EMS Newsletter*, Dec 2014, p. 8.
- **Veni Grant** (250k €) of the Netherlands Organisation for Scientific Research (NWO), for the project: *Deformation problems in Poisson geometry*, 9/2015 - 8/2018.
- **NSF Grant** (146k \$) DMS 14-05671, 6/2014 - 5/2017; after moving to the Netherlands, in 9/2014, Prof. R.L.Fernandes became the principal investigator of the project.

## Publications and preprints

- [1] A. Cabrera, I. Mărcuț, M. A. Salazar, Explicit formulas in Lie theory.  
Submitted. [arXiv:1809.01546](#).
- [2] P. Frejlich, I. Mărcuț, The homology class of a Poisson transversal.  
*International Mathematics Research Notices*, to appear. [arXiv:1704.04724](#).
- [3] A. Cabrera, I. Mărcuț, M. A. Salazar, On local integration of Lie brackets.  
*Journal für die Reine und Angewandte Mathematik*, to appear. [arXiv:1703.04411](#).
- [4] P. Frejlich, I. Mărcuț, On dual pairs in Dirac geometry.  
*Mathematische Zeitschrift* **289** (2018), no. 1-2, 171–200. [arXiv:1602.02700](#).
- [5] P. Frejlich, I. Mărcuț, Normal forms for Poisson maps and symplectic groupoids around PTs.  
*Letters in Mathematical Physics* **108** (2018), no. 3, 711–735. [arXiv:1508.05670](#).
- [6] P. Frejlich, I. Mărcuț, The normal form theorem around Poisson transversals.  
*Pacific Journal of Mathematics* **287** (2017), no. 2, 371–391. [arXiv:1306.6055](#).
- [7] M. Crainic, I. Mărcuț, Reeb-Thurston stability for symplectic foliations.  
*Mathematische Annalen* **363** (2015), no. 1-2, 217–235. [arXiv:1307.4363](#).
- [8] I. Mărcuț, B. Osorno Torres, Deformations of log-symplectic structures.  
*Journal London Mathematical Society (2)* **90** (2014), no. 1, 197–212. [arXiv:1307.3277](#).
- [9] I. Mărcuț, B. Osorno Torres, On cohomological obstructions for log symplectic structures.  
*Journal of Symplectic Geometry* **12** (2014), no. 4, 863–866. [arXiv:1303.6246](#).
- [10] I. Mărcuț, Deformations of the Lie-Poisson sphere of a compact semisimple Lie algebra.  
*Compositio Mathematica* **150** (2014), no. 4, 568–578. [arXiv:1208.2298](#).
- [11] I. Mărcuț, Rigidity around Poisson submanifolds.  
*Acta Mathematica* **213** (2014), no. 1, 137–198. [arXiv:1208.2297](#).
- [12] I. Mărcuț, Formal equivalence of Poisson structures around Poisson submanifolds.  
*Pacific Journal of Mathematics* **255** (2012), no. 2, 439–461. [arXiv:1011.5998](#).
- [13] M. Crainic, I. Mărcuț, A normal form theorem around symplectic leaves.  
*Journal of Differential Geometry* **92** (2012), no. 3, 417–461. [arXiv:1009.2090](#).
- [14] M. Crainic, I. Mărcuț, On the existence of symplectic realizations.  
*Journal of Symplectic Geometry* **9** (2011), no. 4, 435–444. [arXiv:1009.2085](#).

## Supervision

- Florian Zeiser - Radboud University  
PhD Thesis: *Existence of compact Poisson transversals*  
Started: September 2016
- Roy Wang - Utrecht University  
PhD Thesis: *PDE's with symmetry, integrable systems*  
co-advisor: Marius Crainic  
Successfully completed: September 2017

- Roy Wang - Utrecht University  
Master's Thesis: *The Nash-Moser implicit function theorem and applications*, 2012  
co-advisor: Marius Crainic
- Marco Roosken - Radboud University  
Bachelor's Thesis: *The Heat Kernel Proof of the Atiyah-Singer Index Theorem for Dirac Operators*, August 2018
- Maarten Smit - Radboud University  
Bachelor's Thesis: *Prime Decompositions and Geometries of 3-manifolds and the Poincaré Conjecture*, June 2015

### Talks at Conferences, Workshops, and Seminars

- October 2018, Julius-Maximilians-Universität, Würzburg, Germany: speaker at the workshop “Differential Geometry and Applications”
- September 2018, University La Sapienza of Rome, Italy: speaker at the INdAM workshop on “Poisson Geometry and Higher Structures”
- July 2018, Toronto University, Canada: gave an introductory mini-course to Poisson geometry, part of the “Poisson 2018” school and conference
- October 2017, Utrecht University, Netherlands: speaker at the workshop “Lie Pseudogroups: Old and New”
- September 2017, Université de Lyon 1, France: speaker at the “Workshop on topological aspects of symplectic foliations”
- August 2017, KU Leuven, Belgium: speaker at the “Pure and Applied Differential Geometry - PADGE 2017” conference
- August 2017, Oaxaca, Mexico: speaker at the “The Third Pacific Rim Mathematical Association (PRIMA) Congress”, special section on “Poisson Geometry and Its Applications”
- August 2017, Toronto University, Canada: speaker at the “Conference on Poisson Geometry and Stacks”
- December 2016, Max Planck Institute Bonn, Germany: speaker at the workshop “Higher Geometric Structures along the Lower Rhine VIII”
- November 2016, Utrecht University, Netherlands: speaker at the “Workshop on generalized geometry”, with the occasion of Joey v.d. Leer Duran's graduation
- October 2016, University of Cologne, Germany: speaker at the “Seminar on Symplectic and Contact Geometry”

- September 2016, Utrecht University, Netherlands: speaker at the “Workshop on Lie pseudo groups”, with the occasion of Ori Yudilevich’s graduation
- July 2016, ETH Zürich, Switzerland: speaker at the “Poisson 2016” conference
- June 2016, West University of Timișoara, Romania: speaker at the “Geometry and PDE’s” workshop
- June 2016, GQT School and Colloquium, Zeist, Netherlands: gave a mini-course on Dirac Geometry
- April 2016, University of Münster (WWU), Germany: speaker at the “Oberseminar Differentialgeometrie”
- March 2016, IMPA, Rio de Janeiro, Brazil: talk at the “Seminário Simplético Conjunto no Rio”
- March 2016, University of Illinois, at Urbana-Champaign, USA: speaker at the “Symplectic and Poisson Geometry Seminar”
- January 2016, Institut Henri Poincaré, Paris, France: gave a mini-course on Dirac Geometry at the “10th International Young Researcher Workshop on Geometry, Mechanics and Control”
- March 2015, UFRJ, Rio de Janeiro, Brazil: speaker at the “Seminário Simplético Conjunto no Rio”
- March 2015, University of Illinois, at Urbana-Champaign, USA: speaker at the “Symplectic and Poisson Geometry Seminar”
- November 2014, ICMAT, Madrid, Spain: speaker at the “New trends in generalized geometry and Poisson geometry” workshop
- November 2014, GQT School and Colloquium, Zandvoort, Netherlands: speaker at the GQT Colloquium
- August 2014, University of Illinois at Urbana-Champaign, USA: speaker at the “Poisson 2014” conference
- May 2014, Toronto University, Canada: gave a mini-course “Linearization problems around symplectic leaves”
- April 2014, University of Notre Dame, USA: speaker at the “Felix Klein Seminar”
- February 2014, University of São Paulo, Brazil: gave a mini-course on Poisson geometry
- October 2013, Washington University in St. Louis, USA: speaker at the AMS Sectional Meeting, Special Session on Groupoids in Analysis and Geometry

- September 2013, Temple University, Philadelphia, USA: speaker at the “Gone Fishing” workshop on Poisson geometry
- June 2013, Imperial College London, UK: speaker at the seminar of the group of Prof. Darryl Holm
- December 2012, Radboud University Nijmegen, Netherlands: speaker at the “Higher Geometric Structures along the Lower Rhine II” workshop

### **Collaborators**

- Iakovos Androulidakis, National and Kapodistrian University of Athens, Greece
- Paolo Antonini, SISSA, Trieste, Italy
- Alejandro Cabrera, Universidade Federal do Rio de Janeiro, Brazil
- Marius Crainic, Utrecht University, Netherlands
- Rui Loja Fernandes, University of Illinois, at Urbana-Champaign, USA
- Daniele Sepe, Universidad Federal Fluminense, Brazil
- Melinda Lanius, University of Arizona, USA
- Pedro Frejlich, Federal University of Rio Grande do Sul, Brazil
- María Amelia Salazar, Universidad Federal Fluminense, Brazil
- Boris Osorno Torres, De Nederlandsche Bank, Netherlands
- Roy Wang, De Volksbank, Netherlands

### **Organization**

- Co-organizer with Steffen Sagave of the “Geometry Seminar” at Radboud University
- Member on the advisory committee of the school and conference “Poisson 2018”, University of Toronto and Fields Institute, July 9 – July 20, 2018
- Member on the scientific committee of the school and conference “Poisson 2016”, Geneva and Zürich, June 27 – July 8, 2016
- Co-organizer of the workshop “Higher geometric structures along the Lower Rhine” held alternatively in Bonn, Nijmegen and Utrecht
- Member of the local organizing committee for the school and conference “Poisson 2012”, Utrecht, July 23 – August 3, 2012

## Reviewer for the Journals

*Journal of Symplectic Geometry, Pacific Journal of Mathematics, Letters in Mathematical Physics, Bulletin of the London Mathematical Society, International Mathematics Research Notices, SIGMA (Symmetry, Integrability and Geometry. Methods and Applications), Proceedings of the AMS, Journal of Geometric Mechanics, Differential Geometry and Its Applications, Compositio Mathematica, Higher Structures, Mathematische Zeitschrift*

## Teaching

- *Poisson Geometry*, with Marius Crainic, fall 2017 Utrecht University, part of the Dutch national “Mastermath” program
- *Manifolds*, fall 2014, 2015, 2016, 2017, 2018 Radboud University, for which I developed lecture notes
- *Calculus 4*, spring 2015, 2016, 2017 Radboud University
- *Euclidean Geometry*, spring 2014, University of Illinois at Urbana-Champaign
- *Basic Discrete Mathematics*, fall 2013, University of Illinois at Urbana-Champaign