

CURRICULUM VITAE

Personal information

Surname: STUPARIU
Christian names: MIHAI-SORIN
Academic degree: Ph.D.
Date of birth: November 25, 1968
Place of birth: Sibiu, Romania
Citizenship: Romanian
Civil status: married, one child
Professional address: University of Bucharest
Faculty of Mathematics and Computer Science
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University and graduate studies

1988-1993 Faculty of Mathematics, Bucharest University
1993 Master Degree (Diploma) in Mathematics, Bucharest University
Title of thesis: *The Evolution of the Views on the Solar System*
Advisor: Prof. Dr. K. Teleman
1996-1998 Ph.D.-student, with a position as assistant at the Institute
of Mathematics of Zürich University
June 1998 Ph. D., Zürich University
Title of the thesis: *The Kobayashi-Hitchin Correspondence
for Vortex-Type Equations Coupled with Higgs Fields*
Advisors: Prof. Dr. Ch. Okonek, PD Dr. A. Teleman
Referees: Prof. Dr. Ch. Okonek, PD Dr. A. Teleman
PD Dr. M. Lübke (Leiden)

Academic positions

1993-1996	Subassistant, Faculty of Mathematics, University of Bucharest
1996-1999	Assistant, Institute of Mathematics, University of Zürich
1999-March 2001	Assistant, Faculty of Mathematics, University of Bucharest
April-June 2001	EAGER postdoctoral fellowship, University of Zürich
July 2001-June 2002	Postdoctoral assistant, University of Zürich
July 2002-June 2003	Postdoctoral assistant, University of Leiden
Oct. 2003 - Sept. 2004	Postdoctoral assistant, University of Zürich
Oct. 2004-Sept. 2005	Assistant, Faculty of Mathematics, University of Bucharest
Since Oct. 2005	Lecturer (Assistant professor), University of Bucharest

Fields of interest

differential and complex geometry;
mathematical gauge theory;
invariants of quiver representations;
computational geometry and its applications.

Scientific activity

List of Publications and Preprints

- [1] *Sur les courbes caractéristiques associées à l'algèbre de déformation des deux connexions linéaires*, Studii și cercetări matematice, **5-6 (49)** (1997), 423–427.
- [2] *Champs m -spéciaux dans l'algèbre de déformation* (joint work with Liviu Nicolescu and Iulia-Elena Hirică), An.Univ.Oradea, Fasc. Matem., **V** (1995-1996), 119–134.
- [3] *On conformally semisymmetric connections* (joint work with Liviu Nicolescu and Iulia-Elena Hirică), An.Univ.Oradea, Fasc. Matem., **V** (1995-1996), pp. 135–149.
- [4] *Dimensional reduction of monopole equations*, Math. Reports, **3 (53)** (2001), 3, 293–303.
- [5] *The Kobayashi-Hitchin correspondence for vortex-type equations coupled with Higgs fields (I)*, Math. Reports, **3 (53)** (2001), 4, 425–444.
- [6] *The Kobayashi-Hitchin correspondence for vortex-type equations coupled with Higgs fields (II)*, Math. Reports, **4 (54)** (2002), 1, 123–142.
- [7] *On the (G, ρ) -monopole equations*, Revue Roumaine Math. Pures et Appliquées, **48** (2003), 3, 311–326.
- [8] *Stability in linear problems*, Preprint MI-2003-22, University of Leiden, 2003.
- [9] *Quotients in algebraic and symplectic geometry*, Annual Report 2002, Institute of Mathematics, University of Leiden, 5–12.
- [10] *Rings of invariants for representations of quivers* (joint work with Mihai Halic), C. R. Acad. Sci. Paris, Ser.I **340** (2005), 135–140.
- [11] *Un studiu privind învățarea spațiilor vectoriale (Teaching vector spaces)* (joint work with Cristian Voica), Proceedings CAIM 13, Romai Educational Journal **1** (2006), 64–72.
- [12] *Reprezentări mentale ale conceptelor de algebră liniară (Mental representations of basic linear algebra notions)* (joint work with Cristian Voica), Bull. SSM, Proceedings of the RMS Conference, mai 2006.

- [13] *Teaching Linear Algebra to students in Informatics* (joint work with Cristian Voica), Proceedings CAIM 14, Romai Educational Journal **2** (2007), 74–77.
- [14] *Modele matematice utilizate pentru evaluarea în teren a peisajului (Mathematical models in terrain landscape assessment)*, (joint work with Ileana Pătru-Stupariu), Comunicari de Geografie, **XI** (2007), 517–519.
- [15] *GIT-stability for a class of linear systems*, Math. Reports, **9 (59)** (2007), 4, 377–384.
- [16] *A compactness criterion for quotients associated to linear actions*, Analele Universității din București, Matematica, **LVI** (2007), 221–230.
- [17] *Some properties of the (G, ρ) -monopoles*, Bull. of the Transilvania University of Brașov, series B, **14 (49)** (2007), 315–323.
- [18] *Representations of quivers and associated gauge-theoretical problems*, Bull. of the Transilvania University of Brașov, series III, **1 (50)** (2008), 387–394.

PhD Thesis

- [19] *The Kobayashi-Hitchin correspondence for vortex-type equations coupled with Higgs fields*, Zürich, 1998.

Invited talks

- [1] *The Kobayashi-Hitchin correspondence for projective vortex-type equations coupled with Higgs fields*, The fourth international Workshop on differential geometry and its applications, Brașov, 1999.
- [2] *Stable augmented bundles over Kähler manifolds*, Centennial Gh. Vrănceanu, Bucharest, 2000.
- [3] *Vortex-type equations coupled with Higgs fields*, Zweites deutsch-rumänisches Seminar über Geometrie, Dortmund, 2000.
- [4] *Teaching vector spaces* (with C. Voica), The 13th Conference on Applied and Industrial Mathematics, CAIM 2005, Pitești, 2005.

- [5] *Difficulties in understanding vector spaces* (with Cristian Voica), MASSEE International Congress on Mathematics, Paphos, Cyprus, 2006.
- [6] *Reprezentări mentale ale conceptelor de algebră liniară (Mental representations of basic linear algebra notions)*, RMS (Romanian Mathematical Society) Conference, Bucharest, 2006.
- [7] *Modele matematice utilizate pentru evaluarea în teren a peisajului (Mathematical models in terrain landscape assessment)* (with Ileana Pătru-Stupariu), Annual workshop of the Faculty of Geography, University of Bucharest, 2006.
- [8] *Concepte de stabilitate pentru reprezentări de tolbe (Stability concepts for representations of quivers)*, Euler anniversary session, Faculty of Mathematics, University of Bucharest, 2007.
- [9] *Utilizarea limbajului informatic în predarea algebrei liniare și a geometriei (Using informatics in linear algebra and geometry teaching)*, Workshop on Romanian university education , Constanța, 2007.
- [10] *Some properties of the (G, ρ) -monopoles*, Riemannian Geometry and Applications, Dedicated to the Memory of Prof. Radu Roșca, Brașov, 2007.
- [11] *Reprezentări și limbaje în algebra liniară (Representations and languages in linear algebra)* (with Cristian Voica), RMS Conference, Bucharest, 2007.
- [12] *Representations of quivers and associated gauge-theoretical problems*, Riemannian Geometry and Applications, Dedicated to the 65-th birthday of Prof. Dr. Bang-Yen Chen, Brașov, 2008.
- [13] *Landscape metrics for assessment of mountain landscape using GIS applications* (with Ileana Pătru-Stupariu and Roxana Cuculici), IAG Regional Conference on Geomorphology: Landslides, Floods and Global Environmental Change in Mountain Regions, Brașov, 2008.

Research projects

Research team member of the projects:

- [1] *Project EAGER (European algebraic geometry research and training network)*, IHP Research Network.

[2] *Project Complex Geometry*, Swiss National Foundation. Project manager: Prof. dr. Ch. Okonek.

[3] *Invarianti ai Spațiilor Riemann și Aplicații (Riemann spaces invariants and applications)*, CNCSIS (National University Research Council, Romania). Project manager: Prof. dr. I. Mihai.

[4] *Geometrie Riemanniană și Aplicații (Riemannian geometry and applications)*, CEEEX. Project manager: Prof. dr. I. Mihai.

[5] *Elaborarea și implementarea unui algoritm de evaluare și prognoză peisagistică. Aplicație la sectorul montan și subcarpatic al Văii Prahova (Development and implementation of an algorithm for landscape assessment and prognosis. Application to the mountainous and subcarpathian sector of the Prahova Valley)*, CNCSIS. Project manager: Prof. dr. I. Pătru-Stupariu.