

INFORMAȚII PERSONALE

Maria Anastasia Jivulescu

📍 Universitatea Politehnica Timisoara, Piata Victoriei, nr 2, 300006 Timisoara (România)

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EXPERIENȚA PROFESIONALĂ

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|-----------------|-----------------------------------------------------------------------------------------------|
| 2016–2018 | Conferentiar dr. , Departamentul de Matematica, Universitatea Politehnica Timisoara |
| 2011–2016 | Lector dr. , Departamentul de Matematica, Universitatea Politehnica Timisoara |
| 2001–2011 | Preparator/Asistent univ. , Departamentul de Matematica, Universitatea Politehnica Timisoara |
| 02/2010–08/2010 | PostDoc, in grupul de Teoria Informatiei Cuantice, Niels Bohr Institute, Copenhaga, Danemarca |
| 08/2009–11/2009 | Bursiera a Institutului Erwin Schrodinger, Vienna, Austria |
| 2006–2008 | PostDoc, Departamentul de Fizica, Universitatea din Palermo |

EDUCAȚIE ȘI FORMARE

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| 2008 | Doctor in Matematica, cu teza "Teoria ecuatiilor operatoriale si aplicatiile lor in Mecanica Cuantica" |
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INFORMAȚII SUPLIMENTARE

Perioade formare/Participari la conferinte

Mai 2014 "On the reduction criterion for random quantum states", seminar in grupul de Matematica-Fizica, Tehnical University Munchen

Decembrie 1-12, 2014 School of Operator spaces, Noncommutative probability and Quantum groups, Métabief organizat de Laboratoire de Methematic de Besancson, Franta

Octombrie 25 2009 "A review of the central spin model dynamics", Research Center in Quantum Information of The Academy of Science, Bratislava, Slovacia

Octombrie 15/17 2009 "The exact solution of the operator-difference equation with noncommutative and nonconstant coefficients" Institute of Applied Mathematics, University of Klagenfurt, Austria

Septembrie 21/27 2009 Scoala de vara Quantum Information, organizat de Research Center in Quantum Information of The Academy of Science, Bratislava, Slovacia

August-October 2009 Program de cercetare "Entanglement and correlations in many-body quantum mechanics", International Erwin Schroedinger Institute for Mathematical Physics, Viena, Austria

Mai 11/15 2009 Satellite Workshop of Isaac Newton Institute For Mathematical Sciences, University of Cambridge, Cambridge, UK - Algebraic Theory of Difference Equations 11 - 15 May 2009, University of Leeds, UK

Februarie 16/21 2009 Workshop on “*Mathematical Methods in Quantum Mechanics*”, Bressanone-Brixen, Italia

Februarie 9/15 2009 Erasmus Teaching Program pe tema “*Gaudin’s method for diagonalizing the generalized spin star models*” at Department of Physics and Astronomy, University of Palermo, Italia

Noiembrie 2006/Noiembrie 2008 Program de cercetare “*Non-classical effects in the matter radiation interaction: dynamics of open quantum systems with few degrees of freedom*” at Department of Physics and Astronomy, University of Palermo, Italia

August 18/22 2008 Workshop “ Anderson Localization and Related Phenomena”, Isaac Newton Institute For Mathematical Sciences, University of Cambridge, Cambridge, UK

Iulie 14/25 2008 Scoala de vara “ Anderson Localization Transition: Introductory Training Course”, Isaac Newton Institute For Mathematical Sciences, University of Cambridge, Cambridge, UK

Decembrie 2006 Seminarii “*Non-Markovian Quantum Dynamics: Foundations and Applications to Relaxation and Transport Processes*”, by Dr. Heinz-Peter Breuer, Freiburg University, Germania

Martie /Iulie 2001 Bursa Erasmus Lab of Mathematics, Application and Mathematical Physics, University of Orleans, Franta

Publicații 19 articole in reviste ISI, 1 articol Proceeding ISI, 7 articole BDI

M.A. Jivulescu, I. Nechita, P. Gavruta, On symmetric decompositions of positive operators, *J. PHYS. A: Math. Theor.* 50 165303, 2017

Sergey Filippov, Kamil Magadov, **M.A. Jivulescu**, Absolutely separating quantum maps and channels, *NEW JOURNAL OF PHYSICS*, 19,083010, 2017

M.A. Jivulescu, N. Lupa, I. Nechita *Thresholds for Reduction-Related Entanglement Criteria in Quantum Information Theory – QUANTUM INFORMATION and COMPUTATION*, Vol 15, Nr. 13/14, 2015, pag1165-1184

M.A. Jivulescu, N. Lupa, I. Nechita *On the reduction criterion for random quantum states*, *JOURNAL OF MATHEMATICAL PHYSICS*, Volume: 55, Issue: 11, Article Number: 112203-1-27, NOV 2014

M.A. Jivulescu, N. Lupa, I. Nechita, D. Reeb,
Positive reduction from spectra, *LINEAR ALGEBRA and its APPLICATIONS*, Volume 469, NOV 2014, Pag. 276–304, doi:10.1016/j.laa.2014.11.031

M.A. Jivulescu, A. Messina *Exact treatment of operator difference equations with nonconstant and noncommutative coefficients*, *JOURNAL OF ENGINEERING MATHEMATICS* , Volume: 82 , Issue: 1, Pag. 149-160 ,Special Issue: SI , DOI: 10.1007/s10665-012-9602-9, oct 2013

T. Heinosaari, **M.A. Jivulescu**, D. Reeb, M.M. Wolf
Extending quantum operations *JOURNAL OF MATHEMATICAL PHYSICS* Volume: 53 Issue: 1 Article Number: 102208 , oct 2012

Granturi de cercetare 2013/2016 **Director** al Proiectului de cercetare “Tehnici de Matrici Aleatoare în Teoria Informației Cuantice”

PN-II-ID-JRP-2011-2, Autorității Române Naționale pentru Cercetarea Științifică
CNCS-UEFISCDI, proiect Romania –Franta, partener Dr. Ion Nechita, University Paul Sebatier
Toulouse, Franta

2010 Proiect de cercetare FP7-ICT-2007-C “Quantum Engineering via Dissipation” Quantum
Information Theory Group, Coordonator Prof. M.M. Wolf, Niels Bohr Institute, University of
Copenhagen, Danmarca

2007 Proiect de cercetare “*Mathematical modulation based on coherent and squeezed states of bio-
photons generated by human cells*”, Romanian Ministry of Instruction University and Research,
Coordonator Prof.Dr. Draganescu Ghe., Faculty of Mechanics, Politehnica University of Timisoara,
Romania

2007 Proiect de cercetare “*Control and stability of dynamical systems with stochastic perturbations
and applications to economy and aeronautic*”, of the Romanian Ministry of Instruction University and
Research, Coordonator Conf. Dr. Negrea Romeo, Department of Mathematics, Politehnica University
of Timisoara, Romania

Premii **Junior Research Fellowship**, International Erwin Schroedinger Institute for Mathematical Physics,
Vienna, Austria, August-October, 2009 (programul de cercetare “Entanglement and correlations in
many-body quantum mechanics”)

Prize “Francesca Palumbo” for the best Poster in cadrul 14-th Central European Workshop on
Quantum Optics, Palermo, Italy, 1-5 June, 2007