

Al Magnifico Rettore dell'Università degli Studi di Milano

Domanda di partecipazione al Bando di tipo B Cod. ID 6680

60B Devonshire Avenue
PO4 9EG
Southsea, UK
☎ +39 327 5589487
✉ marta.dell'atti@port.ac.uk

Personal data

Name Marta
Surname Dell'Atti
Date and place of birth 16 September 1989, Bari (Italy)
Nationality Italian

Current position

Sep 2022 – today **Senior Research Associate**
Project: Geometric Aspects of Complex Differential Equations
(EPSRC reference EP/W012251/1)
PI: Dr T. Kecker
School of Mathematics and Physics (SMAP)
University of Portsmouth, Portsmouth (UK)

Education

2018 – 2021 **PhD in Mathematics**
Thesis: Integrable systems, random matrices and applications
<http://nrl.northumbria.ac.uk/id/eprint/48331>
Supervisors: Dr A. Moro, Dr C. Benassi
Mathematics of Complex and Nonlinear Phenomena (MCNP)
Mathematics, Physics and Electrical Engineering (MPEE)
Northumbria University, Newcastle upon Tyne (UK)

2012 – 2015 **Master Degree in Theoretical Physics**
Thesis: Quantum corrections to the photon and neutrino deflection
in curved space-time
Supervisor: Prof C. Corianò
Mark: 110/110 with honors
Università del Salento, Lecce (Italy)

2013 – 2014 **Erasmus Project**
Centre International de Physique Fondamentale et de ses Interfaces
(ICFP)
École Normale Supérieure, Paris (France)

2008 – 2011 **Bachelor Degree in Physics**
Thesis: Study of scenarios beyond the Standard Model at ATLAS (LHC) using techniques of Multivariate Analysis
Supervisor: Dr M. Primavera
Mark: 110/110
Università del Salento, Lecce (Italy)

Work experience

- Oct 2022 – today **Teaching**
Delivery of seminars:
◦ Real and Complex Analysis, Level 5 – Mathematics
Tutoring for students of Mathematics, Physics, Statistics and Mechanical Engineering
University of Portsmouth, Portsmouth (UK)
- Feb 2022 – Jul 2022 **Research Associate**
Supervisor: Prof A. Hone
Support in writing the research proposal for the European grant scheme COST
Creation and delivery of lecture notes for PGR students “ r -matrices for finite dimensional integrable systems: the Toda and Pfaff lattice”
School of Mathematics, Statistics and Actuarial Science (SMSAS)
University of Kent, Canterbury (UK)
- Oct 2019 – Dec 2021 **Academic Assistant**
Delivery of seminars in Mathematics and Physics:
◦ Algebra and Trigonometry, Foundation year – Engineering
◦ Trigonometry and Calculus, Foundation year – Mathematics and Physics
◦ Engineering Mathematics, Level 4 – Engineering
◦ Advanced Engineering Mathematics, Level 5 – Engineering
◦ Dynamics, Level 4 – Mathematics and Physics
Mathematics, Physics and Electrical Engineering (MPEE)
Northumbria University, Newcastle upon Tyne (UK)
- Dec 2016 – Sep 2018 **Data Analyst**
Analysis of customers’ practices and management
Customer Relationship Management (CRM)
Banca Popolare di Bari (BPB)
Bari (Italy)
- Jun 2016 – Sep 2017 **Science communicator**
Writing of popularisation articles in Mathematics and Physics
Tom’s Hardware – Science and Technology Review
Online release (Italy)
- Oct 2015 – Dec 2016 **Teaching**
Creation and delivery of lecture notes on Integrated Sciences
Ass. Campus Formazione e Lavoro
Lecce (Italy)

Invited Talks

- Jul 2024 Orthogonal Polynomials, Special Functions, Operator Theory (OPS-FOTA)
Talk: The even Pfaff lattice, skew-orthogonal polynomials and hydrodynamic chains
University of Bristol (UK)
- Jun 2024 Integrability and Conformal Field Theories
Talk: The Toda lattice as a Lagrangian 1-form on coadjoint orbits
City, University of London (UK)
- Feb 2024 Mathematics and Complex Nonlinear Phenomena (MCNP) Seminar Series
Talk: Geometric approach for the identification of Hamiltonian systems of quasi-Painlevé type
Northumbria University (UK)
- Dec 2023 Talks in Mathematics
Talk: Hamiltonian Systems with quasi-Painlevé property with square-root movable singularities
Università degli Studi di Milano (Italy)
- Nov 2023 School of Mathematics and Physics Colloquium
Talk: Pfaff lattice and Hydrodynamic chains
University of Portsmouth (UK)
- Nov 2023 Emergent Hydrodynamics of Integrable Systems and Soliton Gases
Talk: Lagrangian multiform for finite-dimensional integrable systems: the open Toda lattice
CIRM, Marseille (France)
- Nov 2023 Integrable Systems and Mathematical Physics Seminars Series
Talk: Lagrangian multiform for finite-dimensional integrable systems: the open Toda lattice
University of Glasgow (UK)
- Apr 2023 Integrable Systems in Newcastle – ISIN 2023
Talk: Classification of degenerate non-homogeneous Hamiltonian operators
Northumbria University, Newcastle upon Tyne (UK)
- Apr 2023 Integrable Systems and Orthogonal Polynomials – ISOP 2023
Talk: Symmetric matrices, hydrodynamic chains and skew orthogonality
African Institute for Mathematical Sciences (AIMS), Cape Town (South Africa)
- Feb 2023 Integrable Systems Series
Talk: Dispersive shocks and hydrodynamic chains in random matrix models
University of Leeds, Leeds (UK)

- Oct 2022 Statistical Mechanics, Integrability and Dispersive Hydrodynamics
Talk: Symmetric matrix model and hydrodynamic chains
Isaac Newton Institute for Mathematical Sciences (INI), Cambridge (UK)
- Jun 2022 Poisson structures and Non-commutative Integrability
Talk: Dispersive shocks and hydrodynamic chains in random matrix models
University of Kent, Canterbury (UK)
- Mar 2021 Integrable systems in Newcastle 2021
Talk: Symmetric matrix ensemble and hydrodynamic chains
Northumbria University, Newcastle (UK)
- Jun 2016 Integrable Systems Seminars
Talk: Radiative lens equation
Northumbria University, Newcastle (UK)
- Oct 2015 33rd International Max Planck Research School (IMPRS) Workshop
Talk: Quantum correction to massless particle deflection in a gravitational background
Max Planck Institut, Munich (Germany)

Contributed Talks & Posters

- Jul 2023 Early Career Researchers in Mathematics – ECRM 2023
Talk: Pfaff lattice and hydrodynamic chains
Durham University, Durham (UK)
- Jun 2023 Dualities and Symmetries in Integrable Systems – ISLAND 6
Talk: Symmetric matrices and hydrodynamic chains
Sabhal Mor Ostaig, Isle of Skye (UK)
- Jun 2023 Symmetries and Integrability of Difference Equations – SIDE 14.2
Poster: Symmetric matrices and hydrodynamic chains
University of Warsaw, Warsaw (Poland)
- Sep 2022 Integrable Systems and Applications
Poster: Classification of $1 + 0$ Hamiltonian operators
Loughborough University, Loughborough (UK)
- Oct 2022 Statistical Mechanics, Integrability and Dispersive Hydrodynamics
Poster: Pfaff lattice and hydrodynamic chains
Isaac Newton Institute for Mathematical Sciences (INI), Cambridge (UK)
- Jun 2021 New horizons in dispersive hydrodynamics – INI 2021
Poster: Symmetric matrix ensemble and hydrodynamic chains
Northumbria University, Newcastle (UK)

Grants & Workshop Organisation

- Jun 2024 Algebraic and Geometric Aspects of Differential and Difference Equations – AGADDE
<http://smap.port.ac.uk/AGADDE/>
Organising committee
Portsmouth (UK)
- Feb 2024 London Mathematical Society (LMS)
Funds to support the organisation of the AGADDE Workshop
Amount £3.000
Portsmouth (UK)

Visiting & Research Programmes

- Jul 2024 – Aug 2024 Invited participant
Emergent phenomena in nonlinear dispersive waves
Isaac Newton Institute for Mathematical Sciences (INI)
Northumbria University
Newcastle upon Tyne (UK)
- Dec 2023 / Apr 2024 Research Visiting
Collaboration with Dr Gubbiotti and Dr Vergallo
Università degli Studi di Milano (Italy)
- Jul 2022 – Dec 2022 Invited participant
Statistical Mechanics, Integrability and Dispersive Hydrodynamics
Isaac Newton Institute for Mathematical Sciences (INI)
Cambridge (UK)
- Mar 2019 Coulomb Gas, Integrability and Païlevé Equations
Centre International de Rencontres Mathématiques (CIRM)
Luminy – Marseille (France)

Languages

- Italian Native speaker
- English C2
- French C1 Reading, B2 Listening, B1 Speaking

25/06/2024

