TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO   **ID CODE   4445**

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Matematica "Federigo Enriques"**

Scientist- in – charge: **Prof. Paolo Stellari**

[Antonio Michele Miti]

CURRICULUM VITAE

PERSONAL INFORMATION

Surname	Miti
Name	Antonio Michele
Date of birth	[12,04,86]

PRESENT OCCUPATION

Appointment	Structure
PhD Candidate in Mathematics	Joint international PhD programme in Science: - 2017-2018 Università Cattolica del Sacro Cuore, Brescia, Italy - 2019-2020 KU Leuven, Leuven, Belgium

EDUCATION AND TRAINING

Degree	Course of studies	University	year of achievement of the degree
Bachelor Degree (Laurea Triennale)	Physics	Università degli Studi di Milano - Bicocca	2010
Master Degree (Laurea Magistrale)	Physics	Università degli Studi di Milano	2015
PhD	Mathematics	Università Cattolica and KU Leuven	On going (expected to defend in December 2020)

FOREIGN LANGUAGES

Languages	level of knowledge
English	C1 (Toefl-IBT : 102/120 (apr-18))
French	Beginner

AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

Year	Description of award
2016	Premio di Studio e Laurea BCC di Carugate e Inzago. Money prize (1200 euros) awarded to members of the BCC bank who graduated with full marks in the academic year 2015-2016.
2017	Four years PhD scholarship at Università Cattolica del Sacro Cuore

TRAINING OR RESEARCH ACTIVITY

I am a differential geometer mainly working with higher geometry methods in symplectic and multisymplectic geometry.
I am interested in geometric mechanics, classical field theories, quantization and homotopical algebra.
Most of all, I am interested in geometrical and homotopical structures inspired by theoretical physics.

Kewywords: Differential Geometry, Multisymplectic Geometry, L-∞ Algebras, Higher Structures, Axiomatic Foundations of Physics, Geometric Mechanics of Field Systems, Geometric and Algebraic Quantization, Categorical and cohomological methods in geometry and theoretical physics.

Date	Title		Place	
March 2014	Training Course	Introduction to Scientific Programming using GPGPU and CUDA	CINECA-SCAI	Milan
January 2016	Training Course	B2 General English Intensive course	British Council Milano	Milan
March 2016	Training Course	Introduction to Scientific and Technical Computing in C++	CINECA-SCAI	Milan
March 2016	School	Causal Fermion Systems	University of Regensburg	Regensburg
July 2016	School	XIX Summer Diffiety School	Diffiety Institute association and Levi-Civita association	Lizzano in Belvedere
July 2016	School	Geometric Cauchy problems on Lorentzian manifolds	University of Regensburg	Regensburg
January 2017	Ph.D. Course	Topics in Symplectic and Multi-symplectic Geometry	Universita' Cattolica del Sacro Cuore	Brescia
February 2017	Training Course	Python for computational science	CINECA-SCAI	Milan
March 2017	Master Course	Differential Topology and Geometry	Universita' Cattolica del Sacro Cuore	Brescia
March 2017	Master Course	Complex Geometry mod 1	Universita' degli Studi di Milano	Milan
June 2017	School	Graduate School: Introduction To Geometric Analysis: The Atiyah-Singer Index Theorem	BCAM	Bilbao
June 2017	School	11th International Summer School on Geometry, Mechanics and Control	ICMAT	Madrid
September 2017	Master Course	Category Theory	Universita' degli Studi di Milano	Milan
February 2018	Ph.D. Course	Computational methods for the solution of Differential Equations	Universita' Cattolica del Sacro Cuore	Brescia

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UNIVERSITÀ DEGLI STUDI DI MILANO

Date	Type	Title	Organizer	Place
February 2018	Ph.D. Course	Classical and Quantum Knots	Universita' degli Studi di Milano Bicocca, UniversitÃ degli Studi di Pavia	Milan
May 2018	Ph.D. Course	Control of biological functions mediated by nanostructured materials	Universita' Cattolica del Sacro Cuore	Brescia
May 2018	Ph.D. Course	Tools making research easy	Universita' Cattolica del Sacro Cuore	Brescia
June 2018	Ph.D. Course	Scientific computing with Python	Universita' Cattolica del Sacro Cuore	Brescia
June 2018	School	Diffeology, Categories and Toposes and Non-commutative Geometry	Nesin Mathematics Village	Sirince
July 2018	School	Summer School on Poisson Geometry	Fields Institute for Research in Mathematical Sciences	Toronto
October 2018	Ph.D. Course	Symplectic and Poisson geometry	ULB	Bruxelles
November 2018	Ph.D. Course	Cartan's theory of local symmetries	KU Leuven	Leuven
February 2019	Ph.D. Course	Introduction to Motivic Homotopy Theory	Universita' di Verona	Verona
July 2019	School	XXII Summer Diffiety School	Diffiety Institute association and Levi-Civita association	Lizzano in Belvedere
September 2019	School	Summer School in Algebra and Topology	UCLouvain	Louvain la Neuve
October 2019	Industry Course	Functional Programming and Domain-Specific Languages	KU Leuven	Leuven
February 2020	Training Course	Academic Writing for Junior Researchers	KU Leuven	Leuven

PROJECT ACTIVITY

Year	Project
2017-2020	Homotopy moment maps in Multisymplectic geometry.

CONGRESSES AND SEMINARS

Date	Title		Place	
July 2016	Invited Talk	Runde Summer 2016: Demystifying the Peierls' Brackets Construction	IMPRS, Mathematics in the Sciences	Leipzig
April 2017	Workshop	QFT Day	Universita' degli Studi di Milano	Milan
May 2017	Contributed Talk	Covariant Phase Space Via Multysimplectic Geometry	Universita' Cattolica del Sacro Cuore	Brescia
June 2017	Poster	Multi-symplectic Geometry and Covariant Phase Space	ICMAT	Madrid
August 2017	Conference	PADGE 2017	KU Leuven	Leuven
November 2017	Workshop	Formal Theory of PDEs	Universita' degli Studi di Salerno	Fisciano

November 2017	Workshop	Physics and Geometry	Universita' degli Studi di Bologna	Bologna
November 2017	Contributed Talk	An Invitation to Geometric Mechanics	Universita' Cattolica del Sacro Cuore	Brescia
January 2018	Workshop	12th International YOUNG RESEARCHERS WORKSHOP on Geometry, Mechanics and Control	Universita' degli Studi di Padova	Padova
January 2018	Contributed Talk	On the Convenient Category of Diffeological Spaces	Universita' Cattolica del Sacro Cuore	Brescia
May 2018	Invited Talk	On some (multi)symplectic aspects of link invariants	KU Leuven	Leuven
July 2018	Conference	Focus Program on Poisson Geometry and Physics	Fields Institute for Research in Mathematical Sciences	Toronto
September 2018	Workshop	Workshop on MultiSymplecitc Geometry and Applications	Institut Elie Cartan Lorraine	Metz
September 2018	Workshop	Poisson Geometry and Higher Structures	Istituto Nazionale di Alta Matematica	Roma
October 2018	Workshop	Weekly Poisson Workshops	KU Leuven	Leuven
November 2018	Workshop	Symplectic techniques in differential geometry	UAntwerpen	Antwerpen
November 2018	Workshop	Symplectic techniques in differential geometry	ULB	Bruxelles
December 2018	Workshop	13th International YOUNG RESEARCHERS WORKSHOP on Geometry, Mechanics and Control	University of Coimbra	Coimbra
December 2018	Contributed Talk	A Homotopy co-momentum Map in Hydrodynamics	University of Coimbra	Coimbra
Spring 2019	Seminars	Weekly Poisson Workshops	KU Leuven	Leuven
January 2019	Workshop	The Noether Theorems, a hundred years later	Institut Henri Poincare'	Paris
January 2019	Workshop	Higher Geometric Structures along the Lower Rhine XII	Radboud University Nijmegen	Nijmegen
February 2019	Contributed Talk	(An introduction to)MultiSymplectic Geometry and Classical Field systems	KU Leuven	Leuven
March 2019	Invited Talk	Multisymplectic Geometry and Knots	Universita' degli Studi di Salerno	Fisciano
May 2019	Conference	Higher Homotopy Algebras in Topology	MPIM-Bonn	Bonn
May 2019	Workshop	Workshop on Singular foliations	KU Leuven	Leuven
May 2019	Conference	Souriau 2019	Universite' Paris-Diderot	Paris
December 2019	Conference	Supergeometry, supersymmetry and quantization	University of Luxembourg	Luxembourg
December 2019	Poster	MultiSymplectic manifolds and homotopy co-momentum maps	University of Luxembourg	Luxembourg

February 2020	Workshop	Higher Spin Gauge Theories, Topological Field Theory and Deformation Quantization	ULB	Bruxelles
April 2020	Worskhop	Emergent Geometries from Strings and Quantum Fields	Galileo Galilei Institute for Theoretical Physics	Arcetri
June 2020	Workshop	Workshop on Multisymplectic Geometry	KU Leuven	Leuven

PUBLICATIONS

Accepted for Publication
1. Antonio Michele Miti and Leonid Ryvkin. *Multisymplectic actions of compact Lie groups on spheres.* (Prepr.) arXiv:1906.08790, jun 2019. (Accepted in Journal of Symplectic Geometry)

Submitted to Journal
1. Antonio Michele Miti and Mauro Spera. *Derivation of the HOMFLYPT knot polynomial via helicity and geometric quantization.* (Prepr.) arXiv:1910.13400, oct 2019;
2. Antonio Michele Miti and Mauro Spera. *A hydrodynamical homotopy co-momentum map and a multisymplectic interpretation of higher order linking numbers.* (Prepr.) arXiv:1805.01696, may 2018.

In Preparation
1. Antonio Michele Miti. Homotopy moment maps in multisymplectic geometry. Doctoral thesis, Università Cattolica del Sacro Cuore & KU Leuven, (expected) oct 2020;
2. Antonio Michele Miti and Marco Zambon. Multisymplectic geometry, higher courant algebroids, and prequantization. (expected) oct 2020.

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Place and date: Bruxelles, 31/01/2020

SIGNATURE

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