

# Mattia Dalla Brida

## Curriculum vitae

Università di Milano-Bicocca  
Dipartimento di Fisica "G. Occhialini"  
Piazza della Scienza 3, 20126 Milano, Italy  
☎ (+39) 02 6448 2531  
✉ mattia.dallabrida@unimib.it

### Personal information

Date of birth	3rd of December 1986	Nationality	Italian
Current position	Researcher – Università di Milano-Bicocca & INFN	Gender	Male

### Previous posts held

- 10/2016-10/2017 **Assegnista di ricerca**, *Università di Milano-Bicocca & INFN, sezione di Milano-Bicocca, Italy.*
- 10/2014-09/2016 **Research associate**, *NIC Research Group Elementary Particles, DESY – Zeuthen, Germany.*

### Education

#### Degrees

- 06/2015 **Ph.D. in Applied Mathematics**, *University of Dublin, Trinity College, Ireland.*  
Thesis title: "A dynamical study of the chirally rotated Schrödinger functional in lattice QCD". Supervisor: Prof. Stefan Sint.
  - 03/2011 **Laurea Specialistica (M.Sc.) in Theoretical and Computation Physics**, *Università degli Studi di Trento and European Centre for Theoretical Studies in Nuclear Physics and Related Areas (ECT\*), Italy.*  
Final grade 110/110 and distinction.
  - 12/2008 **Laurea Triennale (B.Sc.) in Physics**, *Università degli Studi di Trento, Italy.*  
Final grade 110/110 and distinction.
- other qualifications
- 12/2008 **Percorso di Approfondimento in Fisica (Excellence Course in Physics)**, *Università degli Studi di Trento, Italy.*

### Scholarships and grants

- 12/2011-10/2014 **Irish Research Council Embark Initiative**, *Irish Research Council, Ireland.*
- 05/2011-11/2011 **Marie Curie Early Stage Researcher fellowship**, *STRONGnet Initial Training Network.*
- 09/2010-03/2011 **Aurora Science Research Project**, *Istituto Nazionale Fisica Nucleare (INFN) and ECT\*, Italy.*

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## Conferences and Workshops

### Conferences

- 06/2017 **The 35th International Symposium on Lattice Field Theory**, *Palacio de Congresos*, Granada, Spain.  
Poster title: "QCD in a moving frame: an exploratory study".
- 08-09/2016 **XIIIth Quark Confinement and the Hadron Spectrum**, *Makedonia Palace*, Thessaloniki, Greece.  
Talk title: "A precise determination of the  $N_f = 3$  QCD  $\Lambda$ -parameter from lattice QCD".
- 07/2016 **The 34th International Symposium on Lattice Field Theory**, *University of Southampton*, Southampton, UK.  
Talk title: "The gradient flow coupling from numerical stochastic perturbation theory".
- 07/2015 **The 33rd International Symposium on Lattice Field Theory**, *Kobe International Conference Center*, Kobe, Japan.  
Talk title: "The chirally rotated Schrödinger functional at work".  
Poster title: "Numerical Stochastic Perturbation Theory and Gradient Flow in  $\phi^4$  Theory".
- 06/2014 **The 32nd International Symposium on Lattice Field Theory**, *Brookhaven National Laboratory and Columbia University*, New York, US.  
Talk title: "A dynamical study of the chirally rotated Schrödinger functional in QCD".
- 07-08/2013 **The 31st International Symposium on Lattice Field Theory**, *Johannes Gutenberg University*, Mainz, Germany.  
Talk title: "Numerical Stochastic Perturbation Theory and the Gradient Flow".

### Workshops

- 10/2011 **STRONGnet workshop 2011**, *ECT\**, Trento, Italy.  
Poster title: "Hadron spectroscopy: stochastic techniques and exotic mesons".

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## Invited talks and seminars

- 05/2018 **Frontiers in Lattice Quantum Field Theory**, *Instituto de Física Teórica*, Madrid, Spain.  
Talk title: "A novel form of Numerical Stochastic Perturbation Theory".
- 02/2018 **Humboldt University Berlin and NIC Elementary Particles Group at DESY - Zeuthen**, *DESY*, Zeuthen, Germany.  
Talk title: "New algorithms for NSPT".
- 12/2017 **Technical Advances in Lattice Field Theory**, *CP3-Origins*, Odense, Denmark.  
Talk title: "Algorithmic advances in NSPT and its applications".
- 06/2017 **10th International Workshop on Lattice QFT and Numerical Analysis**, *University of Coimbra*, Coimbra, Portugal.  
Talk title: "Algorithmic advances in NSPT".

- 03/2015 **Higgs Centre for Theoretical Physics**, *University of Edinburgh, School of Physics & Astronomy*, Edinburgh, UK.  
Talk title: "A dynamical study of the chirally rotated Schrödinger functional in lattice QCD".
- 02/2015 **Humboldt University Berlin and NIC Elementary Particles Group at DESY - Zeuthen**, *DESY*, Zeuthen, Germany.  
Talk title: "A dynamical study of the chirally rotated Schrödinger functional in QCD".

## Research visits & collaborations

- 10/2016-08/2017 **Theoretical Physics Department**, *CERN*, Geneva, Switzerland.  
Status: Visiting Scientist  
Duration: 1 year
- 10/2015 **Theoretical Physics Department**, *CERN*, Geneva, Switzerland.  
Host: Prof. Martin Lüscher  
Duration: 2 weeks
- 02/2015 **Università "La Sapienza" di Roma**, Rome, Italy.  
Host: Dr. Mauro Papinutto  
Duration: 1 week
- 09/2013-09/2014 **NIC Research Group Elementary Particles**, *DESY*, Zeuthen, Germany.  
Host: Prof. Rainer Sommer  
Duration: 1 year
- 07/2013 **The Cyprus Institute**, Nicosia, Cyprus.  
Host: Prof. Constantia Alexandrou  
Duration: 3 weeks
- 06-07/2013 **Theory Division**, *CERN*, Geneva, Switzerland.  
Host: Dr. John Bulava  
Duration: 3 weeks
- 11/2012 **Università degli Studi di Parma**, Parma, Italy.  
Host: Dr. Francesco Di Renzo  
Duration: 1 week
- 06/2011 **The University of Cyprus**, Nicosia, Cyprus.  
Host: Prof. Constantia Alexandrou  
Duration: 3 weeks
- 04-08/2011 **ECT\* and Interdisciplinary Laboratory for Computational Science**, Trento, Italy.  
Host: Dr. Luigi Scorzato  
Duration: 4 months

## Teaching

- 03-06/2018 **Ph.D. course: "An introduction to Lattice QCD and its applications"**, *Università di Milano-Bicocca*, Milan, Italy.
- 03-06/2018 **M.Sc. course: "Computational Physics Laboratory"**, *Università di Milano-Bicocca*, Milan, Italy.

## ———— Languages

Italian Fluent  
English Fluent  
German Basic

*Mother tongue*

## ———— Programming Skills

OS: Unix/Linux, Windows  
Languages: C, C++, Python  
Softwares: Matlab, Mathematica, Gnuplot  
Libraries: LAPACK, MPI, openMP, CUDA  
Packages: openQCD, MILC, tmLQCD