

Marco Moraschini

Piazza dei Daini 4, Milano, Italy
MI 20126
✉ moraschini@mail.dm.unipi.it

Personal Data

Name **Marco.**
Surname **Moraschini.**
Place of Birth **Milan (MI).**
Date of Birth **January 21, 1991.**
E-mail **moraschini@mail.dm.unipi.it.**
Personal Address **Piazza dei Daini, 4 , Milano (MI).**

Positions and Titles

01/11/2015-
Expected Date 11/2018 **Ph.D. in Mathematics**, *Università di Pisa*, Pisa, Supervisor: Prof. Roberto Frigerio.
2016-present **Cultore della Materia of Differential Geometry and Topology**, *Qualified as an expert in that subject - Teaching assistant*, Università di Pisa, Pisa.
08/10/2013 **Master Degree**, *Università degli Studi di Milano-Bicocca*, Milano, 110/110 cum
23/07/2015 Laude.
24/08/2010 **Bachelor Degree**, *Università degli Studi di Milano-Bicocca*, Milano, 110/110 cum
15/10/2013 Laude.
09/2005 **High School Diploma**, *Liceo Scientifico L. Cremona*, Milano.
07/2010

Master thesis

Title *Topological complexity and applications*
Advisor Prof. Davide Luigi Ferrario
Co-Advisor Prof. Aniceto Murillo

Bachelor thesis

Title *Weak Convergence and Wiener Measure*
Advisor Prof. Francesco Caravenna

Research stays abroad

25/02/2015 **Extra Project**, *Visiting student at Universidad de Málaga (UMA) with Prof. Aniceto*
05/07/2015 *Murillo during my master thesis*, Málaga, España.

Research

Research interests

- **Simplicial volume and bounded cohomology.**
- **Low dimensional topology and hyperbolic geometry.**
- **Geometric group theory.**
- **Homotopy theory.**

Publications

- (1) **M. Moraschini, A. Murillo**, Abstract sectional category in model structures on topological spaces, **Topology and its Applications**, 199 (2016), pp. 23-31.
(<https://www.sciencedirect.com/science/article/pii/S0166864115005179>)

Preprints

- (1) **R. Frigerio, M. Moraschini**, Ideal simplicial volumes of manifolds with boundary, (<https://arxiv.org/pdf/1802.05223.pdf>).
- (2) **R. Frigerio, M. Moraschini**, On volumes of hyperideal tetrahedra with constrained edge lengths, (<https://arxiv.org/pdf/1801.05326.pdf>).

Works in progress

- (1) **R. Frigerio, M. Moraschini**, Gromov's theory of multicomplexes and its application to simplicial volume, It is a memoir which is the main part of my Ph.D. thesis, Available on request.

Forthcoming talks

- 17-20/09/2018 **Invited speaker to the session: Geometric Topology, Manifolds, and Group Actions**, *Joint meeting of the Italian Mathematical Union, the Italian Society of Industrial and Applied Mathematics and the Polish Mathematical Society*, Wrocław (Poland).
- 23/05/2018 **An introduction to simplicial volume**, *Oberseminar Globale Analysis*, Universität Regensburg.
- 18/05/2018 **An introduction to ideal simplicial volume**, *Geometry seminars*, KIT - Karlsruher Institut für Technologie.
- 17/05/2018 **An introduction to simplicial volume**, *Geometry graduate colloquium*, ETH Zürich.

Talks

- 11/04/2018 **An introduction to ideal simplicial volume**, *Seminari di Geometria*, Mathematical Department of Pisa.
- 02/03/2018 **Simplicial volume: when volume becomes a topological invariant**, *Insalate di Matematica*, Mathematical Department of Milano-Bicocca.
- 04/12/2017 **Lecture on mathematical good manners: the Gromov Norm**, *BAD (Borsisti, Assegnisti, Dottorandi) Seminars*, Mathematical Department of Bologna.
- 20/10/2016 **Categoría seccional abstracta en diferentes estructuras de modelo sobre los espacios topológicos**, *V Encuentro de Jóvenes Topólogos*.
- 02/12/2015 **Topological invariants in model categories**, *Baby Geometri Seminars*, Mathematical Department of Pisa.

25/06/2015 **On abstract topological complexity in model categories over topological spaces**, *InSeGTo (Interesantísimo Seminario de Geometría y Topología)*, Mathematical Department of Málaga.

Poster sessions

12/03/2018 **Ideal simplicial volume**, *Young Geometric Group Theory VII*, Congress Center, Les Diablerets

1-3/02/2018 **Ideal simplicial volume**, *Workshop 2018, Varietà reali e complesse: geometria, topologia e analisi armonica*, Scuola Normale Superiore, Pisa

11/09/2017 **Ideal simplicial volume**, *Ventotene International Workshop 2017: Moduli Spaces*, Ventotene

21/10/2016 **El volumen simplicial: una introducción**, *XXIII Encuentro de Topología*, Málaga

Workshops, Conferences and School attended

03/03/2018 **Topological and Homological Methods in Group Theory**, *Faculty of Mathematics, Bielefeld University*, Bielefeld (Germany).

12/03/2018 **Young Geometric Group Theory VII**, *Congress Center*, Les Diablerets (Switzerland).

1/02/2018 **Workshop 2018, Varietà reali e complesse: geometria, topologia e analisi armonica**, *Scuola Normale Superiore*, Pisa (Italy).

25/09/2017 **Higher Invariants: Manifolds and Groups**, *Universität Regensburg*, Regensburg (Germany).

11/09/2017 **Ventotene International Workshop 2017: Moduli Spaces**, *Centro Polivalente*, Ventotene (Italy).

19/06/2017 **Group Actions and Cohomology in Non-Positive Curvature**, *Isaac Newton Institute*, Cambridge (U.K.).

04/06/2017 **Indam Meeting: Geometric Topology in Cortona**, *Palazzone*, Cortona (Italy).

20/03/2017 **Young Geometric Group Theory Meeting VI**, *Mathematical Institute*, Oxford (U.K.).

21/10/2016 **XXIII Encuentro de Topología**, *Universidad de Málaga*, Málaga (Spain).

18/10/2016 **V Encuentro de Jóvenes Topólogos Espanoles**, *Universidad de Málaga*, Málaga (Spain).

20/06/2016 **Geometric Analysis, Metric Geometry and Topology**, *Institut Fourier*, Grenoble (France).

23/05/2016 **Advanced School on Geometric Group Theory and Low-Dimensional Topology: Recent Connections and Advances**, *ICTP*, Trieste (Italy).

29/06/2015 **4th Spanish Young Topologists Meeting**, *Universidad Complutense*, Madrid (Spain).

Scholarships and Grants

2015-present **Ph.D. Scholarship**, *Università di Pisa*.

- 16/04/2018 - **Teaching Support**, *Istituzioni di Geometria (Differential Geometry)*, Mathematics, Pisa.
30/06/2018
- 01/06/2017 - **Teaching Support**, *Geometry I*, Physics, Pisa.
30/09/2017
- 20/10/2016 - **Teaching Support**, *Geometry I*, Physics, Pisa.
20/12/2016
- 2015 **Scholarship for writing the master thesis abroad**, *Extra Project*, Università degli studi di Milano-Bicocca.

Teaching

- Academic Year **Teaching Support**, *Istituzioni di Geometria (Differential Geometry)*, Mathematics, Pisa.
2016/2017
Second Semester
- 2017/2018 **Examination Board - Cultore della Materia**, *Geometry and Differential Topology*, Mathematics, Pisa.
- Academic Year **Teaching Support**, *Geometry I*, Physics, Pisa.
2016/2017
Second Semester
- Academic Year **Teaching Support**, *Geometry I*, Physics, Pisa.
2016/2017
First Semester
- 2016/2017 **Examination Board - Cultore della Materia**, *Geometry and Differential Topology*, Mathematics, Pisa.

Other Activities

- 01/10/2016 - **Co-organizers of Seminari dei Baby Geometri**, *Università di Pisa*,
present <http://people.dm.unipi.it/babygeometri/>.

Languages

- Italian Native Speaker
- English *ETS - Toeic Listening and Reading (B2 Level)* Total score 830/990, Listening 405/495 and Reading 425/495 (06/11/2014)
- French *Diplôme d'études en langue française (DELFF) (B1 Level)* (22/06/2009); *École de langues "Langue Onze Toulouse" (B2 Level)* (30/07/2012 - 10/07/2012)
- Spanish B2 Level

Mathematical software

Basic knowledge in programming with SageMath and MatLab