

# Davide RAVOTTI

## PERSONAL DATA

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PLACE AND DATE OF BIRTH: Savigliano (CN), Italy | 02 August 1989  
ADDRESS: School of Mathematical Sciences, Monash University  
9 Rainforest Walk, Clayton Campus, Victoria 3800 Australia  
NATIONALITY: Italian  
EMAIL: [davide.ravotti@gmail.com](mailto:davide.ravotti@gmail.com)  
[davide.ravotti@monash.edu](mailto:davide.ravotti@monash.edu)  
WEBSITE: <https://davideravotti.github.io/>

## EDUCATION

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- 2018 | Ph.D. degree at the University of Bristol (Bristol, UK).  
Supervisor: prof. Corinna Ulcigrai.  
Thesis title: *Mixing via shearing in some parabolic flows*.  
This thesis received a *Faculty of Science Commendation*.
- 2014 | Diploma di Licenza of the Scuola Superiore of the University of Udine (Udine, Italy).  
Final mark: 110/110 *cum laude*.
- 2013 | Master degree in Mathematics, University of Udine (Udine, Italy).  
Thesis advisor: prof. Giovanni Panti.  
Thesis title: *Misiurewicz parameters for the quadratic family* (in Italian).  
Final mark: 110/110 *cum laude*.
- 2011 | Bachelor degree in Mathematics, University of Udine (Udine, Italy).  
Thesis advisor: prof. Giovanni Panti.  
Thesis title: *Generalized Farey enumerations* (in Italian).  
Final mark: 110/110 *cum laude*.
- 2008 | Scientific high school degree at Liceo Scientifico "G. Ancina" (Fossano, Italy).  
Final mark: 100/100.

## ACADEMIC POSITIONS

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MAR. 2019-PRESENT | Research Fellow, Monash University (Melbourne, Australia).  
SEP. 2018-MAR. 2019 | Postdoctoral Assistant, University of Zürich (Zürich, Switzerland).  
APR. 2018-AUG. 2018 | Research Associate, University of Bristol (Bristol, UK).

## SEMINARS

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05 DEC. 2019 | Conference "AustMS 2019" (Melbourne, Australia).  
23 SEP. 2019 | Conference "Smooth and Homogeneous Dynamics" (Bangalore, India).  
01 JUL. 2019 | Conference "Dynamics of Parabolic Flows" (Zürich, Switzerland).  
27 MAR. 2019 | Monash University (Melbourne, Australia).  
05 DEC. 2018 | Scuola Normale Superiore (Pisa, Italy).  
03 SEP. 2018 | Conference "Dynamics Days Europe" (Loughborough, UK).  
16 JAN. 2018 | Queen Mary University (London, UK).  
02 NOV. 2017 | Scuola Normale Superiore (Pisa, Italy).

17 OCT. 2017	University of Warwick (Coventry, UK).
12 OCT. 2017	University of Manchester (Manchester, UK).
24 AUG. 2017	Conference “Dynamics in Number Theory and Geometry” (Kingston, Canada).
06 JUN. 2017	Workshop “Modern Trends in the Ergodic Theory of Dynamical Systems” (Rome, Italy).
23 MAR. 2017	University of Bristol (Bristol, UK).
11 JAN. 2017	One-day Workshop on Dynamical Systems, ICTP (Trieste, Italy).
10 JAN. 2017	University of Udine (Udine, Italy).

## PARTICIPATION IN SCHOOLS AND CONFERENCES

03-06 DEC. 2019	Conference “AustMS 2019” (Melbourne, Australia).
23 SEP.-04 OCT. 2019	Conference “Smooth and Homogeneous Dynamics” (Bangalore, India).
01-05 JUL. 2019	Conference “Dynamics of Parabolic Flows” (Zürich, Switzerland).
03-07 SEP. 2018	Conference “Dynamics Days Europe” (Loughborough, UK).
10-16 JUN. 2018	Conference “Ergodic aspects of modern dynamics” (Bedlewo, Poland).
19-23 MAR. 2018	Symposium “Teichmüller Dynamics” (Warwick, UK).
21-25 AUG. 2017	Conference “Dynamics in Number Theory and Geometry” (Kingston, Canada).
05-09 JUN. 2017	Workshop “Modern Trends in the Ergodic Theory of Dynamical Systems” (Rome, Italy).
01-04 AUG. 2016	Conference “Young Researchers in Mathematics” (St. Andrews, UK).
27 JUN.-2 JUL. 2016	Workshop “Analytical Methods in Classical and Quantum Dynamical Systems” (Pisa, Italy).
21-24 MAR. 2016	Conference “BMC” (Bristol, UK).
22-28 NOV. 2015	Simons semester workshop “Ergodic Theory of Dynamical Systems” (Bedlewo, Poland).
29 JUN.-3 JUL. 2015	Workshop “Group representations in Dynamics and Geometry” (Luminy, France).
22-25 JUN. 2015	Workshop “DinAmici – Italian people in Dynamics” (Corinaldo, Italy).
13-17 APR. 2015	LMS-CMI Research School “Statistical Properties of Dynamical Systems” (Loughborough, UK).
4-14 JUN. 2014	ICTP-NLAGA School “Dynamical Systems and Ergodic Theory” (Mbour, Senegal).

## TEACHING AND OTHER ACTIVITIES

JUL. 2018	Tutor at the <i>ICTP Summer School in Dynamics</i> .
2017/18	Tutor for the first year courses <i>Analysis 1</i> and <i>Foundations and Proof</i> . Organiser of the Reading group in <i>Representation Theory of Semisimple Lie Groups</i> .
2016/17	Tutor for the first year courses <i>Analysis 1</i> and <i>Foundations and Proof</i> . Tutor for the second year course <i>Introduction to Geometry</i> . Organiser of the <i>Pure postgraduates seminars</i> . Organiser of the <i>ChaParDyn Reading group</i> .
2015/16	Tutor for the first year courses <i>Analysis 1</i> and <i>Linear Algebra and Geometry</i> . Organiser of the <i>Pure postgraduates seminars</i> . Organiser of the Reading group in <i>Teichmüller Theory</i> .
2014/15	Marker for the courses <i>Ergodic Theory and Dynamical Systems</i> and <i>Algebra II</i> .

## SERVICE TO THE COMMUNITY

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Referee for: *Inventiones Mathematicae*, *Discrete and Continuous Dynamical Systems*.

## LANGUAGE SKILLS

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ITALIAN (native language).

ENGLISH (fluent).

FRENCH (intermediate).

JAPANESE (basic).

## PUBLICATIONS AND PREPRINTS

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- [7] D. Ravotti. Quantitative equidistribution of horocycle push-forwards of transverse arcs. *Enseign. Math.*, to appear.
- [6] A. Kanigowski, D. Ravotti. Polynomial 3-mixing for smooth time-changes of horocycle flows. *Discrete Contin. Dyn. Syst.*, to appear.
- [5] A. Avila, G. Forni, D. Ravotti, C. Ulcigrai. Mixing for smooth time-changes of general nilflows. Submitted, 2019 (*arXiv:1905.11628*).
- [4] D. Ravotti. Parabolic perturbations of unipotent flows on compact quotients of  $SL(3, \mathbb{R})$ . *Comm. Math. Phys.*, 371(1):331–351, 2019.
- [3] D. Ravotti. Mixing for suspension flows over skew-translations and time-changes of quasi-abelian filiform nilflows. *Ergod. Theory Dyn. Syst.*, 39(12):3407–3436, 2019.
- [2] D. Ravotti. Quantitative mixing for locally Hamiltonian flows with saddle loops on compact surfaces. *Ann. Henri Poincaré*, 18(12):3815–3861, 2017.
- [1] G. Panti, D. Ravotti. Measures induced by units. *J. Symb. Log.*, 78(3):886–910, 2013.

### OTHERS:

D. Ravotti. Mixing via shearing in some parabolic flows. Ph.D. thesis (*Faculty of Science Commendation*), University of Bristol, 2019.

04 April 2020.