

# 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)  
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## EDUCATION

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

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- 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

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

## SERVICE TO THE COMMUNITY

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Referee for: 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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- [1] A. Kanigowski, D. Ravotti. Polynomial decay of higher order correlations for discrete-series reparametrizations of horocycle flows. *Preprint arXiv:1909.08799*, 2019.
- [2] A. Avila, G. Forni, D. Ravotti, C. Ulcigrai. Mixing for smooth time-changes of general nilflows. *Preprint arXiv:1905.11628*, 2019.
- [3] D. Ravotti. Parabolic perturbations of unipotent flows on compact quotients of  $SL(3, \mathbb{R})$ . Accepted for publication in *Comm. Math. Phys.*
- [4] D. Ravotti. Mixing for suspension flows over skew-translations and time-changes of quasi-abelian filiform nilflows. Accepted for publication in *Ergod. Theory Dyn. Syst.*
- [5] D. Ravotti. Quantitative mixing for locally Hamiltonian flows with saddle loops on compact surfaces. *Ann. Henri Poincaré*, 18(12):3815–3861, 2017.
- [6] G. Panti, D. Ravotti. Measures induced by units. *J. Symb. Log.*, 78(3):886–910, 2013.

20 September 2019.