

Davide RAVOTTI

PERSONAL DATA

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
davide.ravotti@monash.edu
WEBSITE: <https://davideravotti.github.io/>

SCIENTIFIC INTERESTS

Dynamical Systems and Ergodic Theory.

EDUCATION

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| 2018 | Ph.D. degree at the University of Bristol (Bristol, UK).
Supervisor: prof. Corinna Ulcigrai.
Thesis title: <i>Mixing via shearing in some parabolic flows</i> .
This thesis received a <i>Faculty of Science Commendation</i> . |
| 2014 | Diploma di Licenza of the Scuola Superiore of the University of Udine (Udine, Italy).
Final mark: 110/110 <i>cum laude</i> . |
| 2013 | Master degree in Mathematics, University of Udine (Udine, Italy).
Final mark: 110/110 <i>cum laude</i> . |
| 2011 | Bachelor degree in Mathematics, University of Udine (Udine, Italy).
Final mark: 110/110 <i>cum laude</i> . |

ACADEMIC POSITIONS

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).

PUBLICATIONS AND PREPRINTS

PREPRINTS:

- [8] P. Giulietti, A. Hammerlindl, D. Ravotti. Quantitative global-local mixing for accessible skew products. Submitted, 2020 ([arXiv:2006.06539](https://arxiv.org/abs/2006.06539)).
- [7] A. Avila, G. Forni, D. Ravotti, C. Ulcigrai. Mixing for smooth time-changes of general nilflows. Submitted, 2019 ([arXiv:1905.11628](https://arxiv.org/abs/1905.11628)).

PUBLISHED/ACCEPTED:

- [6] D. Ravotti. Quantitative equidistribution of horocycle push-forwards of transverse arcs. *Enseign. Math.*, 66(2):131–146, 2020.

- [5] A. Kanigowski, D. Ravotti. Polynomial 3-mixing for smooth time-changes of horocycle flows. *Discrete Contin. Dyn. Syst.*, 40(9):5347–5371, 2020.
- [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:

- [a] D. Ravotti. Mixing via shearing in some parabolic flows. Ph.D. thesis (*Faculty of Science Commendation*), University of Bristol, 2018.

SEMINARS

- 02 JUL. 2020 Sydney Dynamics Group (online seminar).
- 23 APR. 2020 University of Maryland (online seminar).
- 22 APR. 2020 Monash University (online seminar).
- 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).

TEACHING AND OTHER ACTIVITIES

AT MONASH UNIVERSITY:

- 2020/21 Co-lecturer and tutor for the course *Metric spaces, Banach spaces, Hilbert spaces*.
- 2019/20 Tutor at the *Mathematics Learning Center*.

AT THE UNIVERISTY OF ZÜRICH:

- 2019/20 Tutor for the course *Dynamical Systems and Ergodic Theory*.

AT THE ICTP SUMMER SCHOOL IN DYNAMICS:

- JUL. 2018 Lecturer and tutor at the *ICTP Summer School in Dynamics* (lecture recording is available online).

AT THE UNIVERISTY OF BRISTOL:

- 2017/18 Tutor for the courses *Analysis 1* and *Foundations and Proof*.
Organiser of the Reading group in *Representation Theory of Semisimple Lie Groups*.
- 2016/17 Tutor for the courses *Analysis 1*, *Foundations and Proof*, and *Introduction to Geometry*.
Organiser of the *Pure postgraduates seminars*.
Organiser of the *ChaParDyn Reading group*.
- 2015/16 Tutor for the 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*.

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).
- 21 DEC. 2018 “Giornata DinAmica” (Rome, Italy).
- 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).

SERVICE TO THE COMMUNITY

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

Reviewer for MathSciNet.

LANGUAGE SKILLS

ITALIAN (native language).

ENGLISH (full professional proficiency).

FRENCH (intermediate).

SPANISH (basic).

JAPANESE (basic).

REFERENCES

Prof. CORINNA ULCIGRAI
Institute für Mathematik
University of Zürich
Winterthurerstrasse 190
8057 Zürich, Switzerland
E-MAIL: corinna.ulcigrai@math.uzh.ch

Prof. GIOVANNI FORNI
Department of Mathematics
University of Maryland
2115 Kirwan Hall, 4176 Campus Dr.
College Park, MD 20742-4015, USA
E-MAIL: gforni@math.umd.edu

Prof. FEDERICO RODRIGUEZ HERTZ
Department of Mathematics
Penn State University
227 McAllister Building
University Park, State College, PA 16802, USA
E-MAIL: hertz@math.psu.edu

02 September 2020.