

Short Curriculum Vitae ⁽¹⁾

- **Personal data:**

Family name: Sorrentino

First name: Alfonso

Nationality:

Web site: <https://www.mat.uniroma2.it/~sorrenti/>

- **Education:**

2008 - Ph.D. in Mathematics, Dept. of Mathematics, Princeton University (USA).

Ph.D. Supervisor: Prof. John N. Mather.

2004 - M.A. in Mathematics, Dept. of Mathematics, Princeton University (USA).

2003 - Laurea degree in Mathematics (Summa cum laude), Univ. Roma Tre (Italy).

- **Current Position:**

Since November 2020: Full Professor in Mathematical Analysis, Univ. Rome Tor Vergata (Italy).

- **Previous Positions:**

2014–2020 Associate Professor in Mathematical Analysis, Univ. Rome Tor Vergata (Italy). 2012–

2014 - Researcher in Mathematical Analysis (tenured), Univ. Roma Tre (Italy).

- **Fellowships:**

Spring 2021 - *Invited Professor*, Institute Henri Poincaré & Univ. Paris Sorbonne (France).

Spring 2020 - *Research fellowship*, Institut. for Pure and Applied Mathem. (IPAM), UCLA (USA).

Fall 2018 - *Research membership*, MSRI Berkeley (USA).

2009–2012 - *Herchel-Smith research fellowship* in Pure Mathematics, Univ. of Cambridge (UK).

2009–2012 - *Newton Trust fellowship* in Mathematics, Pembroke College, Cambridge (UK).

2008–2009 - *Junior research fellowship*, Fondation des Sciences Mathématiques, Paris (France).

2003–2008 - *Frelinghuysen Ph.D. scholarship*, Princeton University (USA).

2012 - *Marie Curie INdAM confund fellowship* Ranked 1st with full score (Declined because incompatible with the concurrent appointment as tenured Researcher at Univ. Roma Tre).

- **Awards:**

2020 - International Consortium of Chinese Mathematicians *Best Paper Award (Gold Medal)*.

2019 - *Barcelona Dynamical System Prize 2019*, Societat Catalana de Matemàtiques (Spain).

2018 - *Guido Fubini Prize* for Mathematics, Accademia delle Scienze di Torino (Italy).

- **Habilitations:**

2018 - Italian National Habilitation (ASN) for Full Professor in Mathematical Analysis.

2018 - Italian National Habilitation (ASN) for Full Professor in Algebra and Geometry.

2009 - French National Qualification for Maître de conférences in Mathematics.

2004 - Teaching training certificate, McGraw Center for Education, Princeton Univ. (USA).

- **Ten selected publications:**

[1] V. Kaloshin and A.S., On the local Birkhoff conjecture for convex billiards, *Annals of Math.*(2), 188 (1): 315–380, 2018.

[2] G. Huang, V. Kaloshin and A.S., Nearly circular domains which are integrable close to the boundary are ellipses. *Geom. and Funct. Analysis*, 28 (2): 334–392, 2018.

[3] G. Huang, V. Kaloshin and A.S., On Marked Length Spectrum of Generic Strictly Convex Billiard Tables, *Duke Math. Journal*, 167 (1): 175 – 209, 2018.

[4] A. Siconolfi and A. S. Global results for Eikonal Hamilton-Jacobi equations on networks, *Analysis & PDE* 11 (1): 171–211, 2018.

⁽¹⁾The full curriculum vitae can be downloaded from <https://www.mat.uniroma2.it/~sorrenti/>

- [5] S. Marò and A.S., Aubry-Mather theory for conformally symplectic systems, *Comm. Math. Phys.*, 354 (2): 775–808, 2017.
- [6] L. Butler and A.S., Weak Liouville-Arnol'd theorems and their implications. *Comm. Math. Phys.*, 315 (1): 109 – 133, 2012.
- [7] A.S., On the integrability of Tonelli Hamiltonians. *Trans. Amer. Math. Soc.*, 363 (10): 5071 - 5089, 2011.
- [8] A.S. and C. Viterbo, Action minimizing properties and distances on the group of Hamiltonian diffeomorphisms. *Geom. & Topol.*, 14 (4): 2383 - 2403, 2010.
- [9] A. Fathi, A. Giuliani and A.S., Uniqueness of invariant Lagrangian graphs in a homology or a cohomology class. *Ann. Sc. Norm. Super. Pisa Cl. Sci.*, 8 (4): 659 - 680, 2009.
- [10] A.S., On the total disconnectedness of the quotient Aubry set. *Ergodic Theory Dynam. Systems*, 28 (1): 267 - 290, 2008.

Monographs:

- A.S., Action-minimizing methods in Hamiltonian dynamics. Monograph in the series *Mathematical Notes* Vol. 50, Princeton University Press, pp. 128, 2015.

• Invitations, talks and lectures:

- Invitations to many talks at **Departmental Seminars**, including: Princeton Univ. (2007), Univ. Cambridge (2010, 2012), ETH Zurich (2017), Univ. Tel Aviv (2017), Univ. Toronto (2008), École Polytechnique (2009), Institut Paris-Jussieu (2011, 2018), ENS Lyon (2009, 2018), ICMAT Madrid (2017), UPC Barcelona (2016), IST Lisbon (2007), SNS Pisa (2013, 2017), High School of Economics Moscow (2020), etc...

- Invitations to many **Departmental Colloquia**: Durham Univ. (2011), Nanjing Univ. (2014), ICMAT Guanajuato (2015), Hokkaido Univ. (2017), SNS Pisa (2018), Univ. Nice (2019).

- Invited speaker many **International Conferences**, including at: Princeton (2018), Oberwolfach (2015, 2019), Sobolev Institute of Mathematics (2020), Fields Institute (2011), Institut H. Poincaré (2009), Banff (2013), MSRI Berkeley (2018), Fudan Univ. (2015, 2016, 2019), Nanjing Univ. (2011), Yau Center Sanya (2017), Tel Aviv Univ. (2014), Technion (2019), IMPA (2011), ENS Lyon (2012), etc...

- **Invited scientific visits** to many international institutions: Institute Henri-Poincaré & Univ. Paris Sorbonne (2021), IPAM UCLA Los Angeles (2020), MSRI Berkeley (2018), ENS Lyon (2018), Hokkaido University (2017), ETH-FIM (2017), Tel Aviv Univ. (2017), UPC Barcelona (2016), Univ. Maryland (2014, 2015), Penn State Univ (2010), CIMAT Mexico (2015), Naning Univ. (2014), Univ. Nantes (2013), Univ. Naples (2009), Univ. Helsinki (2009), CRM Barcelona (2008), IST Lisbon (2007), Institut Henri Poincaré (2006).

• Reviewing Activities:

- **Referee activity** for many international journals. Among the most significant: *Annals of Math. Studies*, *Inventiones Math.*, *Duke Math. Journal*, *Advances in Math.*, *Comm. in Pure and Applied Math.*, *Comm. in Mathem. Physics*, *Ergodic theory and Dyn. Syst.*, *Journal of Modern Dynamics*, *International Math. Res. Notices*, *Bullettin/Proceedings of LMS*, *Annales Henri Poincaré*, *Canadian Journal of Math.*, *Journal de l'École Polytechnique*, etc...

- **Evaluation of grant proposals** for: Canadian Natural Sciences and Engineering Research Council (2012 and 2018), German-Israeli Foundation for Scientific Research and Development (2018), several Italian universities and MIUR (Italian Ministry of Education and Research).

• **Organisational activities**: I served in many Scientific Committees and Organizing Committees of international conferences, workshops and schools.

- **Teaching Activities:**

- Lecturer for many **Undergraduate Courses** at: Univ. Rome Tor Vergata (since 2014), Univ. Roma Tre (2012–2014), Univ. Cambridge (2009–2012), Princeton University (2004–2008).

- **Ph.D. courses** held at: Steklov Institute Moscow (2020), Univ. Torino (2018), Univ. Padova (2017), Univ. Rome Tor Vergata (2016), SNS Pisa (2014), Univ. Nantes (2013), Univ. Cambridge (2009, 2012), Univ. Neuchâtel (2011), Univ. Politec. Catalunya (2010), Univ. Napoli (2009), CRM Barcelona (2008).

- Lecturer at many **Summer/Winter Schools**, including: *V Brazilian School on Dynamical systems* (Belo Horizonte, Brazil, 2019), *ETH-School on Conservative Dynamics* (Engelberg, Switzerland, 2017), *CIMPA Research School on Hamiltonian Dynamics* (Salto, Uruguay, 2015), *School on contact and Riemannian geometry* (Touquet, France, 2012).

- **Institutional Responsibilities:**

- Since 2012 - Member of Ph.D. Scientific Board, Dept. of Mathematics, Univ. Roma Tre.

- 2015–2018 - Elected Member of the *Department executive board*, Univ Rome Tor Vergata.

- 2015 - Member of the *Premio Cuozzo prize selecting committee*, Univ. Rome Tor Vergata.

- 2012–2014 - Member of the *Mathematics Teaching Committee*, Univ. Roma Tre.

- 2010–2012 - *Undergraduate Admission interview panel* for Pembroke College, Univ. Cambridge.

- 2010–2012 - *International Program Committee* of Pembroke College, University of Cambridge.

- **Membership of Scientific Societies:**

- Since 2015 - UMI (Italian Mathematical Union).

- Since 2009 - DinAmicI (Italian network of young dynamicists). Member of the Scientific Board.

- Since 2011 - INdAM GNAMPA (National Group for Analysis, Probability and Applications).

- 2003–2008 - AMS (American Mathematical Society).

- 2003–2008 - MAA (Mathematical Association of America).