

# Emma Lepri

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## Personal information

Email: [emma.lepri@uniroma1.it](mailto:emma.lepri@uniroma1.it)

Date of birth: **15 May 1995**

Nationality: **Italian**

Personal website: [emmalepri.github.io/](https://emmalepri.github.io/)

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## Education

November 2019-May 2023 **Ph.D. in Mathematics**, *Università la Sapienza, Rome*, Tutor: Domenico Fiorenza, Supervisor: Marco Manetti, thesis title: “ $L_\infty$  morphisms and semiregularity”.

September 2017 - July 2019 **Master Degree in Mathematics**, *Università la Sapienza, Rome*, 110/110 cum laude, thesis title: “Model categories and deformations of diagrams of commutative algebras”, under the supervision of Marco Manetti.

September 2014 - July 2017 **Bachelor Degree in Mathematics**, *Università la Sapienza, Rome*, 110/110 cum laude, thesis title: “Categorie modello e struttura modello di Quillen sulla categoria degli spazi topologici”, (“Model categories and Quillen model structure on the category of topological spaces”), under the supervision of Marco Manetti.

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## Experiences abroad

15/08/2022-10/09/2022 **Visiting**, Pennsylvania State University, under the supervision of Ping Xu.

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## Papers and preprints

- E. Lepri, M. Manetti, *On deformations of diagrams of commutative algebras*, In: E. Colombo et al. (eds.), *Birational Geometry and Moduli Spaces*, Springer INdAM Series **39** (2020), 77-107. DOI: 10.1007/978-3-030-37114-2\_6 arXiv:1902.10436
- E. Lepri, M. Manetti, *Connections and  $L_\infty$  liftings of semiregularity maps*, *Journal of Geometry and Physics* 168 (2021) 104303, DOI: 10.1016/j.geomphys.2021.104303, arXiv:2102.05016
- E. Lepri, *Cyclic forms on DG-Lie algebroids and semiregularity*, accepted for publication in *Rend. Sem. Mat. Univ. Padova*, March 2022 journal link arXiv:2104.12658
- E. Lepri, *An elementary approach to the model structure on DG-Lie algebras*, *Rend. Mat. Appl.*, 44 no. 1-2 (2023), 53-76 journal link arXiv:2211.11669
- R. Bandiera, E. Lepri, M. Manetti,  *$L_\infty$  liftings of semiregularity maps via Chern-Simons classes*, preprint, arXiv:2111.12985
- R. Bandiera, E. Lepri, M. Manetti, *Semiregularity maps and deformations of modules over Lie algebroids*, accepted for publication in *Pure Appl. Math. Q.*, January 2023, arXiv:2208.00694

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## Teaching Experiences

2021-2022 **Tutor**, Istituzioni di Matematica Modulo I, Scienze Naturali, Università La Sapienza, Rome

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## Invited Talks

- KCL/UCL Junior Geometry Seminar, “An L-infinity lifting of the first component of the semiregularity map”, 24/06/2021.
- Seminario di Natale 2021, Università degli Studi di Milano, “L-infinity liftings of semiregularity maps”, 21/12/2021.
- GAP (Geometry, Algebra, Physics) Seminar, Penn State, “L-infinity liftings of semiregularity maps and deformations”, 6/09/2022.
- Algebraic Geometry seminar, University of Glasgow, “L-infinity liftings of semiregularity maps and deformations”, 28/03/2023.

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## Grants

- Winner of a grant “Progetti di Avvio alla Ricerca - tipo 1”, 2020, Università di Roma La Sapienza, for the project “Mappa di semiregolarità e morfismi L-infinito”.
- Winner of a grant “Progetti di Avvio alla Ricerca - tipo 1”, 2021, Università di Roma La Sapienza, for the project “Sollevamenti L-infinito delle componenti superiori della mappa di semiregolarità”.

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## Conferences and summer schools

- Workshop “Young Perspectives in Deformation Theory”, Politecnico di Torino, November 2018.
- “Aeneas Conference: Migrating Algebraic Geometry”, Roma Tre, December 2018.
- “Geometry in Pairs”, Roma Tre, December 2019.
- Workshop “Higher Structures and Operadic Calculus”, CRM Barcelona, June 2021.
- Hausdorff School: “Hyperkähler Geometry”, Hausdorff Institut Bonn, September 2021.
- Workshop “Moduli spaces and hyper-Kähler varieties”, La Sapienza, September 2021.
- Seminario di Natale 2021, Università degli Studi di Milano, December 2021.
- GAeL XXIX, Laboratoire de Mathématiques d’Orsay, May 2022.
- CIRM school “Moduli Spaces and Stability Conditions”, Levico Terme, June 2022.
- “Hyperkähler varieties and related topics”, La Sapienza, September 2022.

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## Languages

- **Italian:** native
- **English:** advanced
- **German:** basic