Emma Lepri

Personal information

Email: emma.lepri@glasgow.ac.uk

Nationality: **Italian**

Personal emmalepri.github.io

website:

Current position

September 2023-now

September Research associate, University of Glasgow, Glasgow, Mentor: Michael Wemyss.

Education

November **Ph.D. in Mathematics**, *Università la Sapienza*, *Rome*, Tutor: Domenico Fiorenza, 2019-May Supervisor: Marco Manetti, thesis title: " L_{∞} morphisms and semiregularity". 2023

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

September Bachelor Degree in Mathematics, Università la Sapienza, Rome, 110/110 cum laude, 2014 - July 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.

under the supervision of Ping Xu.

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
- o E. Lepri, M. Manetti, Connections and L_{∞} 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
- o 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
- o R. Bandiera, E. Lepri, M. Manetti, L_{∞} 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

Teaching Experiences

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

Invited Talks

- o 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.
- o 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.

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".
- O 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".

Conferences and summer schools

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

Languages

O Italian: native

• English: advanced

o German: basic