

Jonathan Lorand, Ph.D.

Education

M.A. in Transdisciplinarity, Zurich University of the Arts	09/2020 - present
Ph.D. Mathematics, University of Zurich	09/2015 - 02/2020
M.Sc. Mathematics, ETH Zurich	09/2012 - 08/2015
B.Sc. Mathematics, ETH Zurich	09/2008 - 08/2012

Positions

Postdoc, Institute for Dynamic Systems and Control, ETH Zurich	10/2020 - present
PhD Student, Institute for Mathematics, University of Zurich	09/2015 - 02/2020
Assistant, Chair of Philosophy, ETH Zurich	10/2014 - 08/2015
Assistant, Chair of Macroeconomics: Innovation and Policy, ETH Zurich	10/2014 - 03/2015
Visiting Student Researcher, UC Berkeley	02/2014 - 08/2014
Assistant, Chair of Macroeconomics: Innovation and Policy, ETH Zurich	10/2013 - 02/2014
Assistant, Mathematics Department, ETH Zurich / EPF Lausanne	02/2011 - 12/2012

Publications & Preprints

- (Co)isotropic triples and poset representations (with [C. Herrmann](#), [A. Weinstein](#))
[arXiv:1906.04882](#) (accepted)
- Morita bicategories of algebras and duality involutions (with [A. Valentino](#))
[arXiv:1902.04866](#) (submitted)
- Biochemical coupling through emergent conservation laws (with [J. Baez](#), [B. Pollard](#), [M. Sarazola](#))
[arXiv:1806.10764](#)
- Decomposition of (co)isotropic relations (with [A. Weinstein](#))
[Letters in Mathematical Physics](#) (2016) **106**: 1837
- (Co)isotropic pairs in Poisson and presymplectic vector spaces (with [A. Weinstein](#))
[SIGMA](#) **11** (2015), 072

Teaching

- Seminars: Symplectic & orthogonal geometry; Applied category theory; Advanced linear algebra
- Assistantship: Analysis I, II, & III; Probability and Statistics; Functional Analysis, Linear Algebra I & II; Philosophical Aspects of Physics II

Scholarships & Awards

GRC travel grant	01/2019 - 02/2019
Scholarship of the Anna & Hans Kägi Foundation	09/2012 - 08/2015

Community

Co-organizer of the Zurich Graduate Colloquium	09/2016 - 08/2019
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Languages

German & Swiss-German (fluent), English (fluent), French (B1)

Invited Talks

Network theory seminar, UC Riverside <i>“Classification problems in symplectic linear algebra”</i>	15/01/2019
Winter school in mathematical physics, Les Diablerets <i>“Symplectic poset representations”</i>	11/01/2017
Talks in mathematical physics, ETH Zurich <i>“Subspace pairs and linear relations in presymplectic and Poisson linear algebra”</i>	19/11/2015
Advanced topics in field theory seminar, University of Zurich <i>“(Co)isotropic pairs and (co)isotropic linear relations”</i>	29/09/2015

Conferences, Workshops, Research visits

Applied Category Theory 2019, Oxford	15/07/2019 - 19/07/2019
Category Theory 2019, Edinburgh	07/07/2019 - 13/07/2019
Research visit to J. C. Baez, UC Riverside	1/2019 - 2/2019
Poisson geometry and higher structures, Rome	10/09/2018 - 14/09/2018
Applied Category Theory 2018, Leiden	17/04/2018 - 04/05/2018
Categorification, representation theory and symplectic geometry, Bonn	27/11/2017 - 01/12/2017
String 2017, Oxford	08/09/2017 - 09/09/2017
Workshop on persistent homology, Montpellier	11/07/2017 - 13/07/2017
Women in geometry and topology, Zurich	14/06/2017 - 16/06/2017
Winter school in mathematical physics, Les Diablerets	08/01/2017 - 13/01/2017
Poisson 2016, Geneva & Zurich	27/06/2016 - 08/07/2016
Masterclass: Perturbative quantization of gauge theories on manifolds with boundary, Aarhus	09/11/2015 - 13/11/2015
Conference on geometric analysis in honor of Tudor Ratiu, Lausanne	12/06/2015 - 13/06/2015
Weyl and the problem of space, Constance	26/05/2015 - 29/05/2015
Hermann Weyl and the philosophy of the ‘new physics’, Paris	10/12/2014 - 11/12/2014