Arnaud Maret

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Employment

Universität Heidelberg, PhD Student of Mathematics, Sep 2018 - present, Thesis title (provisory): The symplectic structure of representation varieties, Supervisor: prof. Peter Albers.

Education

- MSc in Mathematics (with mention), **ETH Zürich**, Sep 2016 Jun 2018, Thesis title: Forcing relations for periodic orbits of surface homeomorphisms, Supervisor: prof. Will J. Merry.
- BSc in Mathematics, **EPF Lausanne**, Sep 2013 Jun 2016, Thesis title: *The Hardy-Littlewood Circle Method and the Waring Problem*, Supervisor: prof. Yu-Ru Liu (University of Waterloo, CA).
- Exchange program, University of Waterloo, CA, Sep 2015 Jun 2016.

Teaching and seminars

- Organiser of RTG Seminar on Topological K-Theory, Universität Heidelberg, 2020.
- Co-supervisor of *Blockseminar Hyperbolische Geometrie* (prof. Albers), Universität Heidelberg, 2020.
- Co-organiser of Seminar on Dynamics of Teichmüller space (prof. Albers & Wienhard), Universität Heidelberg, 2019.
- Co-organiser of RTG Seminar on Rational Homotopy Theory, Universität Heidelberg, 2019.
- Co-supervisor of *Proseminar Differentialgeometrie* (prof. Albers), Universität Heidelberg, 2018.
- Class Tutor for Wahrscheinlichkeit und Statistik (prof. Cheridito), ETH Zürich, 2018.
- Class Tutor for Analyse 2 (prof. Krieger), EPF Lausanne, 2015.
- Class Tutor for Analyse 1 (prof. Monod), EPF Lausanne, 2014.

Talks

- 16. (Oct 2020) K-Theory and stable homotopy groups of spheres. At RTG Seminar on Topological K-Theory, Universität Heidelberg.
- 15. (Jun 2020) Introduction to sub-Riemannian geometry. At Symplectic Topics Seminar, Universität Heidelberg.
- 14. (Jun 2020) Symplectic reduction of cotangent bundles. At Seminar Geometric Hydrodynamics meets Dynamical Data Analysis, Universität Heidelberg.
- 13. (Jun 2020) Super-maximal representations: geometry & dynamics. At Hauptseminar Geometrie, Universität Heidelberg.
- 12. (Apr 2020) The symplectic geometry of polygons. At Hauptseminar Symplectische Geometrie, Universität Heidelberg.
- 11. (May 2020) Super-maximal representations and ergodicity. At Hauptseminar Symplectische Geometrie, Universität Heidelberg.
- 10. (Dec 2019) Symplectic toric manifolds. At Symplectic Topics Seminar, Universität Heidelberg.
- 9. (Nov 2019) Differential calculus on persistence barcodes. At Journal Club Topological methods in data analysis, Universität Heidelberg.
- 8. (Oct 2019) Holomorphic vector bundles on a curve. At Seminar on Higher Teichmüller theory via Higgs bundles, Universität Heidelberg.
- 7. (Jul 2019) Dynamics of the $SL_2(\mathbb{R})$ -action on translation surfaces. At Seminar on Dynamics of Teichmüller Space, Universität Heidelberg.
- 6. (Apr 2019) Introduction to Teichmüller spaces and deformation of complex structures. At Seminar on Dynamics of Teichmüller Space, Universität Heidelberg.
- 5. (Mar 2019) Formality of Kähler manifolds. At RTG Seminar on Rational Homotopy Theory, Universität Heidelberg.
- 4. (Nov 2018) The Goldman Symplectic Form. At Seminar on the Symplectic Structure of Representation Varieties, Universität Heidelberg.
- 3. (Jun 2018) Forcing relations for periodic orbits of surface homeomorphisms. At Hauptseminar Symplectische Geometrie, Universität Heidelberg.
- 2. (Mar 2018) idem. At Symplectic Geometry Seminar, JLU Giessen.
- 1. (Mar 2018) idem. At Oberseminar Dynamische Systeme, Ruhr-Universität Bochum.

Conferences and workshops attended

- (Oct 2020) Symposium: Mathematics in Sciences, Engineering and Economics, KIT Karlsruhe.
- (Oct 2020) Teichmüller Theory: Classical, Higher, Super and Quantum, CIRM Marseille.
- (Jun 2020) Nearly Carbon Neutral Geometric Topology Conference, online.
- (Feb 2020) Winter School on Invariant Function Theorems, JLU Giessen.
- (Feb 2020) CAST 2020: XIV Workshop on Symplectic Geometry, Contact Geometry, and Interactions, Universiteit Antwerpen.
- (Nov 2019) Geometric Dynamics Days, RWTH Aachen University.
- (Aug 2019) Introductory Workshop: Holomorphic Differentials in Mathematics and Physics, MSRI, Berkley.
- (Aug 2019) Workshop on bounded cohomology, Universität Heidelberg.
- (May 2019) Workshop on Geometry, Topology and Computation, Universität Heidelberg.
- (Apr 2019) Graduate school on Geometry of Teichmüller spaces, Simons Center, Stony Brook University, NY.
- (Mar 2019) CAST 2019: XIII Workshop on Symplectic Geometry, Contact Geometry, and Interactions, Humboldt University, Berlin.
- (Mar 2019) Symposium: Geometry, Topology, Analysis and Dynamical systems, Universität Heidelberg.
- (Feb 2019) Geometric Analysis meets Geometric Topology, Universität Heidelberg.
- (Nov 2018) Geometric Dynamics Days, JLU Giessen.
- (Nov 2018) Workshop on Computational Topology and Topological Data Analysis, Heidelberg Institute for Theoretical Studies.
- (Aug 2018) Summer School on Equivariant Symplectic Homology, JLU Giessen.