

Report

Research work during second year of INdAM fellowship

Ulrich von der Ohe

Università degli Studi di Genova

October 16, 2019

1. Courses attended

1. Reading course in Commutative Algebra

- Period: April 2019.
- Lecturers: A. Conca and M. Varbaro.
- Place: Università degli Studi di Genova.

2. Seminar attended

I attended more than ten talks in the Algebra & Geometry seminar, Università degli Studi di Genova, during 2018/12–2019/10. Titles and dates may be found online at commalge.tumblr.com/ and sites.google.com/view/ag-genova/seminar/.

3. Seminar talks given

1. “A framework for Prony’s methods”, Osnabrück University, March 25, 2019.
2. “Learning algebraic decompositions using Prony structures”, ShanghaiTech University, September 24, 2019.
3. “Introduction to algebraic decomposition of signals using Prony structures”, Università degli Studi di Genova, October 9, 2019.

4. Conferences/workshops/summer schools attended

1. 2019/03/11–15: “Summer School and Workshop on Polytopes – Geometry, Combinatorics, Probability”, Ruhr University Bochum.
2. 2019/03/19–23: “Interactions between commutative algebra, representation theory, and algebraic geometry”, Münster University.
3. 2019/04/08: INdAM Review meeting, Roma.
4. 2019/06/03: “Giornata INdAM 2019”, Università degli Studi di Bari Aldo Moro.
5. 2019/07/01–05: “Recent developments in commutative algebra”, CIME-CIRM Course, Levico Terme.
6. 2019/07/09–13: “SIAM Conference on Applied Algebraic Geometry”, Universität Bern.
7. 2019/09/02–05: “2nd Conference on Combinatorial Structures in Geometry”, Osnabrück University.
8. 2019/09/11–13: “Algebraic Combinatorics in Genova”, Università degli Studi di Genova.
9. 2019/09/26–27: “GTM Seminar”, Università degli Studi di Genova.

5. Contributed talks given at conferences

1. “Learning algebraic decompositions using Prony structures”, “SIAM Conference on Applied Algebraic Geometry”, Universität Bern.
2. “Learning algebraic decompositions using Prony structures”, “2nd Conference on Combinatorial Structures in Geometry”, Osnabrück University.

6. Visiting periods to other universities

1. 2019/03/18, 25–29, and 05/06–31: Osnabrück University; Host: T. Römer.
2. 2019/09/15–25: ShanghaiTech University; Host: M. Tsakiris.

7. Papers submitted/preprints

S. Kunis, T. Römer, and U. von der Ohe. Learning algebraic decompositions using Prony structures. Preprint, [arXiv:1907.01547v1](https://arxiv.org/abs/1907.01547v1) [math.AC], 26 pages, July 2019.