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Employment

January 2017 - present: PIMS postdoc at Simon Fraser University, Burnaby (Canada).

January 2015 - December 2016: postdoc at the University of British Columbia, Vancouver (Canada).

March 10th, 2014 - November 30th, 2014: postdoc at the Max Planck Institute for Mathematics, Bonn (Germany).

Education

2010 - 2014: Ph.D. course (*corso di perfezionamento*) in Mathematics at the Scuola Normale Superiore, Pisa (Italy).

February 27th, 2014: Ph.D. defense, mark 70/70 summa cum laude. Thesis: *Infinite root stacks of logarithmic schemes and moduli of parabolic sheaves*, supervisor: Angelo Vistoli.

2004 - 2009: *Corso ordinario* in Mathematics at the Scuola Normale Superiore, Pisa (Italy).
(info: http://en.wikipedia.org/wiki/Scuola_normale).

December 21st, 2009: Final exam (*esame di licenza*), mark 70/70 summa cum laude.

2004 - 2009: Student in Mathematics at the University of Pisa, Pisa (Italy).

June 29th, 2007: Bachelor's degree (*laurea triennale*), mark 110/110 summa cum laude. Thesis (in Italian): *Characteristic classes of vector bundles*, supervisor: Angelo Vistoli.

July 24th, 2009: Master's degree (*laurea magistrale*), mark 110/110 summa cum laude. Thesis: *Deformation theory*, supervisor: Angelo Vistoli.

Awards and scholarships

2017-2018: PIMS postdoctoral fellowship.

2013: research grant (*borsa di formazione*) at the Scuola Normale Superiore.

2010-2012: Ph.D. scholarship at the Scuola Normale Superiore.

2004-2009: undergraduate and master's scholarship at the Scuola Normale Superiore.

Research interests

Moduli theory, algebraic stacks, deformation theory, étale homotopy theory, Grothendieck rings, toric and logarithmic geometry, root stacks, Kato-Nakayama spaces, parabolic sheaves, moduli of sheaves.

Publications

Refereed research papers

7. (with R. Pirisi) *On the motivic class of the classifying stack of G_2 and the spin groups*, arXiv:1702.02649 (20 pages), to appear in Int. Math. Res. Not.
6. (with A. Vistoli) *The motivic class of the classifying stack of the special orthogonal group*, published online in Bull. Lond. Math. Soc. (DOI:10.1112/blms.12072).
5. (with A. Vistoli) *The Kato-Nakayama space as a transcendental root stack*, published online in Int. Math. Res. Not. (DOI:10.1093/imrn/rnx079).
4. (with D. Carchedi, S. Scherotzke, and N. Sibilla) *Kato-Nakayama spaces, infinite root stacks, and the profinite homotopy type of log schemes*, Geometry & Topology 21-5 (2017), 3093-3158.
3. *Moduli of parabolic sheaves on a polarized logarithmic scheme*, Trans. Amer. Math. Soc. 369 (2017), no. 5, 3483-3545.
2. (with F. Poma and F. Tonini) *Stacks of uniform cyclic covers of curves and their Picard groups*, Algebraic Geometry 2 (2015), no. 1, 91-122.
1. (with A. Vistoli) *Deformation theory from the point of view of fibered categories*, Handbook of moduli, Vol. III, 281-397, Adv. Lect. Math. (ALM), 26, Int. Press, Somerville, MA, 2013.

Preprints

5. *Parabolic sheaves with real weights as sheaves on the Kato-Nakayama space*, arXiv:1703.04777 (33 pages), submitted.
4. (with A. Vistoli) *A general formalism for logarithmic structures*, arXiv:1703.02663 (13 pages), submitted.
3. (with S. Scherotzke and N. Sibilla) *On a logarithmic version of the derived McKay correspondence*, arXiv:1612.08961 (52 pages), submitted.
2. (with T. Foster, D. Ranganathan and M. Ulirsch) *Logarithmic Picard groups, chip firing, and the combinatorial rank*, arXiv:1611.10233 (14 pages), submitted.
1. (with A. Vistoli) *Infinite root stacks and quasi-coherent sheaves on logarithmic schemes*, arXiv:1410.1164 (57 pages), submitted.

Refereed conference proceedings

1. *Batyrev mirror symmetry*, to appear in the Proceedings of the Superschool on derived categories and D-branes.

Teaching

Fall 2017: Instructor, FAN X99 (section D300), Foundations of analytical and quantitative reasoning, at SFU.

Summer 2016: Instructor, Math 200/253 (section 921), Multivariable calculus, at UBC.

Summer 2015: Instructor, Math 200/253 (section 921), Multivariable calculus, at UBC.

Spring 2015: Instructor, Math 105 (section 206), Integral calculus for commerce and social sciences, at UBC.

2010 - 2013: Tutoring activities for first and second-year students at the Scuola Normale Superiore.

Fall 2012 - Spring 2013: TA for a first-year mathematics course at the Biology department, University of Pisa (instructor for a "remedial course" and class tutoring).

Fall 2012: Tutoring and exam assistance (grading of written exams and oral exams) for a first-year algebra course at the Mathematics department, University of Pisa.

Invited talks

(upcoming) **June 2018**: A Tale of Algebra and Geometry, A Conference to celebrate Angelo Vistoli's 60th Birthday, Pisa (Italy).

(upcoming) **October 2017**: Canadian Western Algebraic Geometry Symposium, Edmonton (Canada).

August 1st, 2017: *Geometric realizations of logarithmic schemes*, Stacks Project Workshop, Ann Arbor (USA).

April 25th, 2017: *Divisor theory on tropical and log smooth curves*, University of Liverpool, Liverpool (UK).

September 15th, 2016: *Stability conditions (on root stacks)*, Scuola Normale Superiore, Pisa (Italy).

April 12th, 2016: *Kato-Nakayama spaces vs infinite root stacks*, Algebraic Geometry and Number Theory Seminar, Rice University, Houston (USA).

February 12th, 2016: *Parabolic sheaves, root stacks and the Kato-Nakayama space*, Geometry and Topology Seminar, University of Waterloo, Waterloo (Canada).

February 8th, 2016: *Parabolic sheaves, root stacks and the Kato-Nakayama space*, Geometry & Topology Seminar, University of Western Ontario, London (Canada).

December 1st, 2015: *Kato-Nakayama spaces vs infinite root stacks*, F.R.A.G.ME.N.T. Seminar, University of Colorado at Boulder, Boulder (USA).

November 16th, 2015: *Logarithmic geometry and some applications*, Caltech Algebraic Geometry Seminar, Caltech, Pasadena (USA).

April 17th, 2015: *Log geometry (with a slight view toward tropical geometry) and root stacks*, STAGS (Student Tropical Algebraic Geometry Symposium) 2015, Brown University, Providence (USA).

April 4th, 2015: *Infinite root stacks of log schemes*, Bellingham Algebraic Geometry Seminar, Western Washington University, Bellingham (USA).

December 16th, 2014: *Root stacks of logarithmic schemes and moduli of parabolic sheaves*, Workshop of Algebraic Geometry, Università degli studi di Milano, Milano (Italy).

Posters

(Infinite) root stacks of log schemes, `http://www.sfu.ca/~mtalpo/stuff/posterV5.pdf`, WAGS, Seattle (USA), 2015.

Moduli of parabolic sheaves, `http://www.mimuw.edu.pl/~gael/xx/posters/poster_talpo.pdf`, GAeL XX, Grenoble (France), 2012.

Other talks

March 22nd, 2017: *What is a stack, really?*, AG student seminar at UBC.

January 19th, 2017: *Grothendieck rings of varieties and stacks*, NT/AG seminar at SFU.

September 26th, 2016: *Taking roots vs taking logarithms*, Algebraic Geometry seminar at UBC.

July 20th, 2016: *Batyrev mirror symmetry*, Superschool on derived categories and D-branes at University of Alberta, Edmonton (Canada).

February 2nd, 2015: *Infinite root stacks of log schemes*, CRG "Geometry and Physics" seminar at UBC.

April 28th, 2010: *Moduli problems and (algebraic) stacks*, Graduate student seminar at the Scuola Normale Superiore.

February 24th, 2009: *Deformation theory*, Graduate student algebraic geometry seminar at the Scuola Normale Superiore.

Visits

Spring semester 2012: *Visiting Student Researcher* at the University of California, Berkeley (USA), under the supervision of Martin Olsson.

March/April 2009: *Program Associate* of the Special semester on Algebraic Geometry at the Mathematical Sciences Research Institute (MSRI), Berkeley (USA).

Invitations to research workshops

May 8th - 12th, 2017: *CMO workshop: Beyond Toric Geometry*, Casa Matemática Oaxaca, Oaxaca (Mexico).

April 10th - 14th, 2017: *AIM workshop: Foundations of tropical schemes*, American Institute of Mathematics, San Jose (USA).

May 2nd - 6th, 2016: *CMO workshop: Algebraic, Tropical, and Nonarchimedean Analytic Geometry of Moduli Spaces*, Casa Matemática Oaxaca, Oaxaca (Mexico).

Service

Organizing activities

September 2015 - December 2016: co-organizer of the Algebraic Geometry Seminar at UBC.

Refereeing and reviewing

Referee for: Manuscripta Mathematica, Advances in Mathematics, Mathematica Scandinavica.

Reviewer for: Mathematical Reviews, Zentralblatt MATH.

Outreach activities

"University orientation courses" for high school students, organized by the Scuola Normale Superiore

Rovereto (Italy), 2013: tutor for scientific subjects. Talk: *"Infinity" in mathematics*.

Rovereto (Italy), 2011: tutor for scientific subjects. Talk: *Modular arithmetic and sums of squares*.

References

Dan Abramovich, Brown University (`abrmovic@math.brown.edu`)

Kai Behrend, University of British Columbia (`behrend@math.ubc.ca`)

(teaching) Albert Chau, University of British Columbia (chau@math.ubc.ca)
Nathan Ilten, Simon Fraser University (nilten@sfu.ca)
Martin Olsson, University of California, Berkeley (martinolsson@berkeley.edu)
Angelo Vistoli, Scuola Normale Superiore (angelo.vistoli@sns.it)

Last updated: August 17, 2017