

# **Amos Turchet** | CV

Chalmers University of Technology and University of Gothenburg
SE 412 96 Gothenburg – Sweden

#### **Education**

Chalmers University of Technology

Postdoc, Mentor: Prof. Per Salberger

University of Udine

Ph.D. in (Arithmetic) Geometry, Supervisor: Prof. Pietro Corvaja

Göteborg (Sweden)

2014 – present

Udine (Italy)

2011 – 2014

Brown University

Visiting Researcher, Advisors: Prof.s Dan Abramovich, Joseph Silverman

Providence RI (USA)

Sept 2012 – Feb 2013

University of UdineUdine (Italy)M.S. in Mathematics, Grade: 110/110 cum Laude2007 - 2010

University of UdineUdine (Italy)B.S. in Mathematics, Grade: 110/110 cum Laude2003 – 2007

Conservatory "A.Boito" of ParmaParma (Italy)Classical Guitar Diploma, Grade: 10/102001 – 2007

#### **Research Interests**

**Arithmetic Geometry**: Diophantine geometry, Function fields geometry, Integral and Rational points on varieties, Vojta's conjectures, Heights theory.

**Algebraic Geometry**: Logarithmic geometry, Moduli spaces, Minimal Model Program, Higher dimensional varieties, Jet spaces.

**Other Interests**: Toric varieties, Gromov-Witten invariants, Complex analytic constructions related to arithmetic problems, Computational aspects of Algebraic and Arithmetic Geometry, Optimization, Programming.

## **Publications and Pre-prints**

- 1: Fibered Threefolds and Lang-Vojta's Conjecture over Function Fields (submitted); arXiv: 1310.7871;
- 2: Invitation to Integral and Rational points on curves and surfaces w/ Pranabesh Das (accepted in Contemporary Mathematics); arXiv: 1407.7750;
- **3**: A fibered power theorem for pairs of log general type w/ Kenneth Ascher (submitted); arXiv: 1506.07513;
- **4**: *Uniformity of stably integral points on log general type varieties* w/ Kenneth Ascher (in preparation);
- **5**: Geometric Lang-Vojta Conjecture in  $\mathbf{P}^2$  (in preparation);
- **6**: Ph.D. Thesis: Geometric Lang-Vojta Conjecture in the projective plane;
- 7: Master of Science Thesis: A case of Vojta's Conjecture over function fields (Italian) 2010.

## **Experience**

#### Teaching at University.....

#### **Chalmers University of Technology**

Göteborg

Lecturer and Teaching Assistant

2014-present

Courses taught:

- O Scheme Theory (Lecturer): January May 2015.
- Multi-variable calculus (TA Matlab session): Sept-Oct 2014, Sept-Oct 2015.
- O Calculus II (TA Matlab session): Nov-Dec 2014.

University of Udine

Udine

Teaching Assistant

2010-2014

Courses taught:

- Matematica Discreta Algebra, Graph Theory and Linear Algebra;
  - Nov 2013 May 2014 and Feb-May 2013 and Feb-Jun 2012.
- Matematica Calculus and Linear Algebra:
  - Oct 2011 Jan 2012 and Nov 2010 Jan 2011.

Other.....

#### Scuola di Musica di Pagnacco

Pagnacco (Ud)

Classical and Modern Guitar Teacher

2004-2006

## Selected Talks, Advanced Schools and Conferences

- O Terzo incontro italiano di Teoria dei Numeri Center "Ennio de Giogi", Pisa, Italy Sept 21-24 2015 (Talk given);
- 2015 Summer Research Institute on Algebraic Geometry University of Utah, US, July 13-31 2015;
- Quantitative Arithmetic Geometry Mittag-Leffler Institute, Sweden, June 22-26 2015 (Talk given);
- $\circ$   $\mathbb{N}^3$ -days II University of Copenhagen, Denmark, June 16-17 2015 (Talk given);
- o Final ERC meeting in Diophantine Geometry Accademia dei Lincei, Rome, May 27-29 2015;
- O Distribution of Rational and Holomorphic Curves in Algebraic Varieties BIRS, Canada, March 15-20 2015;
- O Seminar Algebra and Geometrie Universität Basel, Basel, Switzerland, December 19 2014 (Talk given);
- N³-days I University of Copenhagen, Denmark, December 15-16 2014;
- Vojta's Conjectures BIRS, Canada, September 28 October 3 2014 (Talk given);
- Chalmers' Algebraic Geometry and Number Theory Seminars, Göteborg, Sweden, Sept 2014 and March 2015 (Talks given);
- O Intercity Workshop in Arakelov Theory Rome "Sapienza", Italy, September 8-11 2014 (Talk given);
- Second ERC Research Period on Diophantine Geometry Cetraro, Italy July 14-26 2014;
- O Géométrie Algébrique en Liberté SISSA, Trieste, Italy June 23-27 2014 (Poster presented);
- On Lang and Vojta's conjectures CIRM, Marseille, France March 3-7 2014 (Talk given);
- TULSF VIII. A meeting in Algebraic Geometry University of Ljubljana, Slovenia Sept 19 2013 (Talk given);
- O Thematic Program on Rational Points, Rational Curves and Entire Holomorphic Curves on Algebraic Varieties Centre de recherches mathématiques, Montréal, Canada June 2013;
- AGNES Brown University, Providence, US October 26-28 2012 (Poster presented);
- Junior Arit and Alg Geom Seminars Brown University, Providence, US Oct 2012 and Jan 2013 (Talks given);
- O Giornate di Geometria Algebrica ed argomenti correlati Center "Ennio de Giorgi", Pisa, Italy May 23-26 2012;
- Moduli of Curves and Gromov-Witten Theory Institut Fourier, France June 20 July 8, 2011 (Talk given);
- School and Conference on Modular Forms and Mock Modular Forms and their applications in Arithmetic, Geometry and Physics - ICTP, Trieste, Italy - Feb 20 - March 18, 2011;

#### **Grants**

Grants: : Knut and Alice Wallenberg Foundation Travel grant (2014)

Ph.D. Scholarship: : MIUR - Scholarship of 3 years for Ph.D. Program (2011-2013)

Merit Award: : City of Magnano in Riviera – Scholarship for Academic Merit (2003 and 2008)

## **Organizational and Editorial Work**

- Co-organizer of  $\mathbb{N}^3$ -days III, to be host at Chalmers University, Dec 4-5 2015;
- Organizer of Algebraic Geometry and Number Theory Seminars at Chalmers University 2014-2016;
- Webmaster for the website www.n-cube.net and for the Seminars in AG and NT webpage for Chalmers;
- Local Organizer of the 9th Metaheuristics International Conference MIC, Udine, July 25-28 2011;
- Reviewer for Zentralblatt MATH since 2014;
- Member of the European Mathematical Society;

## Languages

Italian: Mother tongue.

English: Good reading, listening, writing and speaking skills.

Latest certification: December 2011 - IELTS overall score 7.5

French and German: Limited.

## **Computer skills**

**Programming Languages**: C, Python, basics of C++ and Java. **Operating Systems**: Mac OSX, Microsoft Windows, Linux.

Math Software: Mathematica, TEX, LATEX, basics of Matlab, Sage, Macaulay2. Other: Microsoft office, Open Office, Basics of HTML, PHP, Git and CSS.

#### Interests

Music....

**Choral**: Active member of "Chalmers manskör". Member of "Musicanova" Choir.

Guitarist and arranger: ¿Cuinon? - Folk Progressive Friulan Music - 3 CDs recorded.

Other

Charity Work: Active Member of Blood Donors Association of Friuli (Italy);

**Driving License**: Italian (European) driving license (category B);

Misc: Reading, Traveling, Soccer and Basketball fan;

Visited Country: Austria, Slovenia, Croatia, Germany, Netherlands, Belgium, France, England, Sweden,

US, Canada, Denmark, Switzerland.

Last modified: 30 September 2015.