

# Curriculum Vitae of Alessio Corti

11<sup>th</sup> February 2020

## Contact

**Work Address** Department of Mathematics, South Kensington Campus,  
Imperial College London, LONDON SW7 2AZ, UK

**Phone** (020) 759 41870

**Email** a.corti@imperial.ac.uk

**Web** <http://www3.imperial.ac.uk/people/a.corti>  
<http://geometry.ma.ic.ac.uk/acorti>

## Education

- 06/92 PhD University of Utah, dissertation *Families of Del Pezzo surfaces*, supervisor Prof. János Kollár.
- 09/87 BA University of Pisa, Diploma Scuola Normale Superiore.

## Employment

- 10/05–present Chair of Pure Mathematics, Department of Mathematics, Imperial College London, South Kensington Campus, London SW7 2AZ (Tel.: 020 75948483)
- 10/01–09/05 Reader in Algebraic Geometry, Department of Pure Mathematics and Mathematical Statistics, Centre for Mathematical Sciences, University of Cambridge, Wilberforce Road, Cambridge CB3 0WB, UK (Tel.: 01223 337999)

- 10/96–09/01 University Lecturer, Department of Pure Mathematics and Mathematical Statistics, Centre for Mathematical Sciences, University of Cambridge, Wilberforce Road, Cambridge CB3 0WB, UK (Tel.: 01223 337999)
- 10/93–09/96 L. E. Dickson Instructor in Mathematics, Department of Mathematics, University of Chicago, 5734 S. University Avenue, Chicago, IL 60637, USA (Tel.: 773 7027100)
- 10/92–09/93 Postdoctoral Fellow, The Mathematical Sciences Research Institute, 17 Gauss Way, Berkeley, CA 94720-5070, USA (Tel.: 5106420143)
- 01/92–09/92 Ricercatore, Scuola Normale Superiore, Piazza dei Cavalieri 7, 56126 Pisa, IT (Tel.: 050509111)

## Research students

- Giulia Gugiatti, October 2016–present
- Kristina Kubiliūtė (co-supervised with Konstanze Rietsch), October 2015–present
- Andrea Petracci, *On Mirror Symmetry for Fano varieties and for singularities*, September 2017
- Mohammad Akhtar (co-supervised with T. Coates and A. Kasprzyk), *Mutations of Laurent Polynomials and Lattice Polytopes*, July 2015
- Andrew MacPherson (co-supervised with R. Thomas), *Skeleta in non-Archimedean and tropical geometry*, May 2014
- Andrew Strangeway (co-supervised with T. Coates), *Quantum reconstruction for Fano bundles*, December 2013
- Vladimir Lazić, *Towards Finite Generation of the Canonical Ring without the Minimal Model Program*, 2009
- Anne-Sophie A.-C. Kaloghiros, *The topology of terminal quartic 3-folds*, 2007

- Alessandro Chiodo, *Higher spin curves and the Witten top Chern class*, 2003
- Paul Hacking, *A compactification of the space of plane curves*, 2001

## Postdoctoral Research Associates

- Tom Ducat, RA under EPSRC grant EP/N03189X/1, 2019–2020
- Sara A. Filippini, Jagellonian University Kraków (RA under EPSRC grant EP/N03189X/1, Jan. 2018–Jan. 2019)
- Liana Heuberger, RA Loughborough University (RA under EPSRC grant EP/N03189X/1, 2016–2017 and 2018–2019)
- Cristina Manolache, Lecturer University of Sheffield (Marie Curie EU Fellow, 2012–2014)
- Alexander Kasprzyk, Associate Professor University of Nottingham (RA under EPSRC grant EP/I008128/1, 2010–2014)
- Paul Johnson, Lecturer University of Sheffield (RA under EPSRC grant EP/E022162/1, 2009–2010)
- Hiroshi Iritani, Associate Professor University of Kyoto (RA under EPSRC grant EP/E022162/1, 2007–2009)
- Florin Ambro, Institute of Mathematics “Simion Stoilow” of the Romanian Academy (Marie Curie Research Fellow Cambridge 2002–2003)
- Massimiliano Mella, Full Professor Università di Ferrara (CNR Postdoctoral Fellow, Cambridge 1998–1999)

## Research grants

### Principal Investigator:

**EP/N03189X/1** Programme Grant *Classification, Computation, and Construction: New Methods in Geometry* (October 2016–September 2021)

**EP/I008128/1** *Extremal Laurent Polynomials* (October 2010–April 2014)

**EP/E022162/1** *Fano varieties and quantum cohomology* (October 2007–September 2010)

**LMS Young Russian** to sponsor a visit by V. Golyshev, October 2003

### **Co-Investigator**

**EP/G06170X/1** Programme Grant *Applied derived categories* (PI Prof Richard Thomas, October 2010–December 2015)

**EP/E04137X/1** *Warwick Symposium on Algebraic Geometry 2007–08* (PI Prof Miles Reid, University of Warwick)

**EP/C013271/1** *Coherent Sheaves in Mirror Symmetry* (PI C. Teleman);

## **Organisation: long term programs**

- 2007–2008 Warwick EPSRC Symposium on Algebraic Geometry, main organisers M. Reid (Warwick) and A. Corti (Imperial College London)
- Newton Institute Programme Feb–Jul 2002 Higher Dimensional Complex Geometry, project leaders M. Reid (Warwick) A. Corti (Cambridge) M. Gross (Warwick)

## **Organisation: conferences**

- 09/19, *3CinG Workshop*, Chicheley Hall (co-organised with Liana Heuberger)
- 07/19, *3CinG Workshop Mirror Symmetry and Cluster Algebras*, CMS Cambridge (co-organised with Tom Coates, Mark Gross, Anne-Sophie Kaloghiros, Marta Mazzocco, Miles Reid, Konstanze Rietsch, Lauren Williams and Michel van Garrel)
- 10/18 *3CinG Workshop*, Warwick (co-organised with Miles Reid)
- 10/17 *3CinG Workshop on Mirror Symmetry and Fano Manifolds*, LMS De Morgan House, London (co-organised with Tom Coates, Mark Gross and Miles Reid)

- 10/16, *3CinG kick-off workshop* Warwick (co-organised with Miles Reid)
- 09/16, *Algebraic Geometry, Old and New*, Clay Mathematical Institute, Oxford (co-organised with János Kollár, Miles Reid and Nick Shepherd–Barron)
- 03/13, *4<sup>th</sup> Workshop on Higher Dimensional Algebraic Geometry*, NCTS Taipei (co-organised with Jiun-Cheng Chen and Jungkai Chen)
- 09/10, *Perspectives on Algebraic Varieties*, CIRM Trento (co-organised with Marco Andreatta)
- 09/08, *Higher Dimensional Algebraic Geometry: Classification, Minimal Models, Fano Varieties and Stacks* (organisers: Ivan Cheltsov (Edinburgh), Alessio Corti (Imperial), Miles Reid (Warwick)), ICMS Edinburgh
- 07/08 *60 Miles* (organisers: Gavin Brown (Kent), Alastair Craw (Glasgow) Sándor Kovács (Washington) Alessio Corti (Imperial) David A. Ellwood (Clay Inst) Balázs Szendrői (Oxford)), London
- 04/07 *Workshop on canonical and minimal models* (with J.P. Demailly, J. Kollár and S. Mori), MSRI
- 04/06 BIRS Workshop *Recent trends in higher dimensional geometry* (with X. Chen, C. Ingalls, S. Kovács, J. McKernan, M. Reid), Banff
- 03/04 *Higher Dimensional Algebraic Geometry* (with M. Reid and J.A. Chen), NTU, Taipei

## Selected invited talks

- 10/19, *LUCIA GEOMETRICA a celebration of geometry*, Stockholm University
- 08/19, *Mutations: Mirror Symmetry, Deformations, and Combinatorics*, Banff International Research Station for Mathematical Innovation and Discovery (BIRS)
- 07/19, *el Pezzo surfaces and Fano varieties*, Düsseldorf

- 05/19, *Whos Who in Mirror Symmetry?*, HSE Moscow
- 03/19, *The Spring 2019 AGNES (Algebraic Geometry Northeastern Series) conference*, U. Mass Amherst
- 01/19 *Calabi–Yau Motives*, Mainz
- 11/18 EDGE 2018 Workshop *Constructions and Obstructions in Birational Geometry*, ICMS conference center Edinburgh
- 09/18 *Complex Algebraic Geometry*, Cetraro
- 07/18, *Classical algebraic geometry and related topics: a conference in honour of Mauro Beltrametti on the occasion of his 70<sup>th</sup> birthday*, Genova
- 06/18, *A tale of algebra and geometry: a conference to celebrate Angelo Vistolis 60th birthday*, Pisa
- 09/17, *Instruments of Algebraic Geometry*, Bucharest
- 08/17, *Hodge Theory, Moduli and Representation Theory*, Simons Center, Stony Brook
- 07/17, *SFB Kolloquium*, Mainz
- 08/15 *Invariant of Moduli Spaces*, George Boole Mathematical Conference, Cork, Ireland
- 05/15 *Supermoduli*, Simons Centre for Geometry and Physics, Stony Brook
- 03/15 *Algebraic Geometry*, Oberwolfach
- 07/14 *Joint Congress RSME-SCM-SEMA-SIMAI-UMI*, Bilbao, Spain
- 02/14 *Birational Geometry and Foliations*, HIM, Bonn
- 03/14 *Convegno Matematica e Cultura*, Venezia, Italy
- 09/13, *Classification of Algebraic Varieties and related topics*, Cetraro, Italy

- 06/13 *Joint International Meeting of the AMS and the Romanian Mathematical Society*, Alba Julia, Romania
- 06/13 *Colloque Solstice*, Institute Mathematique Jussieu
- 07/12 *6ECM* (invited lecture), Kraków
- 06/12 *6ECM Satellite Meeting Algebraic and Arithmetic Geometry*, Kraków
- 05/12 *Symmetries, Singularities and Strings*, Simons Center Stony Brook
- 04/12 *Motivic structures on quantum cohomology: progress reports*, MPI, Bonn
- 10/11 *Complex Algebraic Geometry*, MFO Oberwolfach
- 09/11 *Congresso Nazionale dell'UMI* (conferenza generale), Bologna
- 08/08 *Komplexe Analysis*, MFO Oberwolfach
- 07/08 *Mirror Symmetry*, HIM Bonn
- 02/07 *Quantum Cohomology of Stacks*, Institut Henri Poincaré
- 08/06 *Methods of Integrable Systems in Geometry*, Durham
- 07/06 *Joint SMF-UMI meeting, Algebraic Geometry session*, Torino
- 03/06 JAMI workshop and conference *Recent developments in Higher Dimensional Algebraic Geometry*, Johns Hopkins University
- 08/05 *2005 AMS Summer Institute Algebraic Geometry*, Seattle, USA
- 07/04 *2004 NCTS Summer School/Workshop in Algebraic Geometry*, Hsinchu, Taiwan
- 05/04 *International Algebraic Conference*, Moscow, Russia
- 08/03 *Minimal Models Activity*, ANU, Canberra, Australia
- 10/02 *The Fano Conference*, Torino, Italy

- 09/01 *Higher dimensional varieties and rational points*, Budapest, Hungary
- 12/00 *Workshop on Explicit Algebraic Geometry*, Tokyo, Japan
- 09/00 *Number Theory and Arithmetical Geometry*, Obernai, France
- 08/98 ICM 98-satellite conference *Algebraic and Arithmetic Geometry*, Essen, Germany
- 06/97 *Symposium on higher dimensional Algebraic Geometry*, RIMS, Kyoto, Japan
- 07/96 *Warwick European Algebraic Geometry Conference*, Mathematics Research Centre, University of Warwick, Coventry, UK
- 07/95 *AMS Summer Research Institute on Algebraic Geometry*, UCSC, Santa Cruz, CA
- 08/94 *Second Conference in Algebraic geometry*, Yaroslavl, Russia
- 11/92 *Higher Dimensional Birational Geometry*, MSRI, Berkeley, CA

## Special lecture series

- 09/18 *Nairobi School– Pre-Workshop and Workshop in Algebraic Geometry*, Nairobi
- 08/16 *Advanced School on Moduli Spaces, Mirror Symmetry and Enumerative Geometry*, ICTP Trieste
- 09/14 EMS School *New Perspectives on the Classification of Fano Manifolds*, Udine
- 09/13 *Topics in Higher Dimensional Algebraic Geometry*, Pragmatic 2013 Research school in Algebraic Geometry and Commutative Algebra, Catania, Italy (with P. Cascini and Y. Kawamata)
- 01/13, *Special RTG Lecture Series in Algebra-Geometry-Topology, Mirror symmetry and Fano manifolds*, UT Austin

- 04/13 *Minicourse on Mirror Symmetry and Fano 3-folds*, NCTS, Taipei
- 07/11 *Extremal Laurent Polynomials*, School on “Moduli of curves and Gromov–Witten theory,” Institut Fourier, Grenoble
- 11/10 *Polinomi di Laurent estremali e varietà di Fano*, minicorso, Roma 3
- 07/08 *New methods in orbifold Gromov-Witten theory* (part of the “School and Workshop on Aspects of Moduli”), centro De Giorgi, Pisa
- 09/07 *Introductory workshop on Higher Dimensional MMP*, Warwick
- 06/07 *Geometry of Complex Projective Varieties and the Minimal Model Program*, Institut Fourier, Grenoble
- 06/06 *Summer School on Resolution of Singularities*, ICTP, Trieste
- 08/05 SMI Summer course *Algebraic Geometry*, Cortona, Italy (with C. Peterson)
- 09/01 *Birational Geometry of 3-folds*, AGaFe School 2001, Ferrara, Italy (with N. Shepherd-Barron and F.L. Zak)
- 08/00 SMI Summer course *Algebraic Geometry*, Cortona, Italy (with J. Wisniewski)
- 05/99 Age-Europroj 1999 *Advanced School in Algebraic Geometry Geometry of 3-folds*, Levico-Terne, Trento, Italy (with M. Reid and M. Gross)
- 06/97 *Workshop on higher dimensional Algebraic Geometry*, RIMS, Kyoto, Japan

## Long-term Academic Visits

- 09/18–10/18, Fudan University, Shanghai
- 01/17–04/17 IMPA, Rio de Janeiro
- 03/13–04/13 National Taiwan University, Taiwan
- 01/08–05/08 MSRI Research Professor, Berkeley

- 04/04–09/04 Visiting Professor, University of Tokyo
- 01/04–03/04 National Taiwan University, Taiwan
- 10/01–12/01 Università di Roma “La Sapienza”

## Honours

- 07/12 Invited lecture at the 6<sup>th</sup> ECM, Kraków
- 09/11 Conferenza generale, *Congresso Nazionale dell’UMI*, Bologna
- LMS Whitehead Prize, 2002

## Editorial board

- *EPSRC Peer Review Associate College*
- *London Mathematical Society* Editorial Advisor
- *Rendiconti del Seminario Matematico della Università di Padova* Editor