

## ROBERTO SVALDI: Curriculum Vitae

### Università degli Studi di Milano

Dipartimento di Matematica “F. Enriques”  
Via Saldini 50  
Milan MI 20133 Italy

### Personal data

email: roberto.svaldi@unimi.it  
home page: rsvaldi.github.io  
ORCID ID: 0000-0003-1489-5899

### CURRENT POSITION

---

#### Ricercato a tempo determinato di tipo B (RTDB)

09.2022-present

Università degli Studi di Milano, Dipartimento di Matematica “F. Enriques”.

*The position of RTDB is a 3-year tenure track position in the Italian system.*

### EMPLOYMENT HISTORY

---

#### Bernoulli Instructor and Marie Curie Fellow,

07.2019-08.2022

École polytechnique fédérale de Lausanne, Institute of Mathematics.

*The position of Bernoulli Instructor at EPFL is comparable to a fixed-term Lectureship or to an Assistant Professorship without tenure.*

*As a Marie Curie Fellow, hosted by the Chair of Algebraic Geometry, I carried out research on my project “Moduli and boundedness problems in Algebraic Geometry” from 01.07.2019 to 31.12.2021.*

**University Research Fellow**, University of Cambridge,  
Department of Pure Mathematics and Mathematical Statistics.

09.2015-06.2019

Visiting Scholar at SISSA during academic year 2016-17.

*The University Research Fellowship is comparable to an independent postdoc position.*

**Fellow and College Lecturer in Pure Mathematics**,  
Churchill College, Cambridge.

10.2015-06.2019

Visiting Scholar at SISSA during academic year 2016-17.

**Assegnista di ricerca (Post-Doc)**, Scuola Internazionale di Studi Superiori Avanzati, 10.2016-09.2017  
Area of Mathematics. Group of Geometry and Mathematical Physics.

Supervisor: Prof. Jacopo Stoppa. Funded under ERC Starting Grant no. 307119.

*I visited Professor Jacopo Stoppa at SISSA Trieste as part of a collaboration at the interface between birational algebraic geometry and complex geometry focused on the study of Kähler–Einstein metrics on algebraic varieties.*

### RESEARCH INTERESTS

---

Minimal Model Program and its applications.

Birational geometry of Calabi–Yau and Fano varieties with applications to physics.

Boundedness questions in algebraic geometry and their topological implications.

The topology of singularities in algebraic geometry and interactions with physics.

Holomorphic foliations and dynamics on projective varieties.

Toric geometry and toroidal compactifications.

Hyperbolicity questions in algebraic geometry.

## EDUCATION

<b>Ph. D. in Mathematics.</b> Massachusetts Institute of Technology, Department of Mathematics. Thesis: “Log geometry and extremal contractions”. Advisor: Prof. J. McKernan.	09.2010-06.2015
<b>Laurea Specialistica in Matematica</b> (equivalent of M.S. in Mathematics). Università degli Studi di Roma 3, Faculty of Sciences. Thesis: “On the cohomology algebras of compact Kähler manifolds and the Kodaira problem”. Advisor: Prof. L. Caporaso. Graduated on 19.05.2010, with grade 110/110 cum laude.	09.2008-05.2010
<b>Laurea Triennale in Matematica</b> (equivalent of B.S. in Mathematics). Università degli Studi di Pavia, Faculty of Sciences. Thesis: “Riemann’s singularity theorem”. Advisor: Prof. M. D. T. Cornalba. Graduated on 16.09.2008 with grade 110/110 cum laude.	10.2005- 09.2008

## AWARDS, FELLOWSHIPS, GRANTS, HABILITATIONS

<b>Awards</b>	
<b>Federigo Enriques Prize</b> , 2016, awarded by Unione Matematica Italiana and Fondazione Federigo Enriques (€2000).	03.2017
<b>Grants</b>	
<b>Rita Levi Montalcini Fellowship</b> , PI, “From birational geometry to its applications: Minimal Model Program, moduli spaces, and algebraic foliations” (€233427,59), funded by the Italian Ministry for Research and University.	08.2022
<b>Grant #550</b> , Co-PI, Foundation Compositio, (9500EUR) <i>for the organization of the workshop in September 2022.</i>	03.2022
<b>Grant</b> , Co-PI, Bernoulli Center for Fundamental Studies, (35000CHF) <i>for the organization of the workshop in September 2022.</i>	02.2022
<b>Scheme 4 Grant</b> , Co-PI, London Mathematical Society, Ref.41916 (£1000), <i>for the visit to King’s College London in February 2020.</i>	10.2019
<b>Marie Skłodowska Curie Individual Fellowship</b> , PI, “Boundedness and Moduli problems in birational geometry”, Grant No.842071. (€191149,44)	07.2019-12.2021
<b>EPSRC Postdoctoral Fellowship</b> , PI, “Moduli and boundedness problems in geometry”, EP/S024808/1, rejected in favour of the MSCA Fellowship. (£293505,40)	02.2019
<b>Scheme 8 Grant</b> , PI, London Mathematical Society, Ref.81613, (£4000) <i>for the organization of the PhD School of December 2017.</i>	06.2017
<b>AMS Graduate Student Travel Grant</b> (\$250).	03.2015
<b>Habilitations</b>	
<b>Abilitazione scientifica nazionale</b> a professore associato <i>Italian national habilitation to the ranking of associate professor</i>	02.2022
<b>Qualification</b> aux fonctions de Maître de Conférences <i>French national habilitation to the ranking of Maître de Conférences</i>	01.2019
<b>Fellowships and Scholarships</b>	
<b>Praecis Presidential Fellowship</b> , Massachusetts Institute of Technology (\$40000).	09.2010-05.2011
<b>INdAM scholarship</b> for students of the Laurea Specialistica program, awarded by the National Institute for High Mathematics “F. Severi” (€9000).	04.2009-03.2011
<b>INdAM scholarship</b> for students of the Laurea Triennale program,	01.2006-12.2008

awarded by the National Institute for High Mathematics “F. Severi” (€12000).  
**Scholarship** at Collegio Borromeo and University Institute for Higher Studies,  
 Pavia, Italy.

10.2005-10.2008

## VISITING POSITIONS

---

Visitor at King’s College London (Host: C. Spicer).	02.2020
Visitor at University of Bonn (Host: L. Tasin).	10.2018
Visitor at Princeton University (Host: G. Di Cerbo).	03.2018
Visitor at BICMR, Beijing (Host: C. Xu).	10.2017
Visitor at SISSA, Trieste (Host: J. Stoppa).	10.2016-09.2017
Visitor at IMPA, Rio de Janeiro (Host: J. V. Pereira).	03.2016-04.2016
Visitor at Mathematics Department, UC San Diego.	02.2015-06.2015
Visitor at Mathematics Department, Princeton University under the Exchange Scholar Program.	09.2014-12.2014
Visitor at Mathematics Department, UC San Diego.	10.2013-06.2014

## PUBLICATIONS

### Articles in peer-reviewed journals

- 
10. (joint with C. Spicer), Local and global applications of the Minimal Model Program for co-rank one foliations on threefolds, in print at Journal of the European Mathematical Society, 57 pp., DOI: 10.4171/JEMS/1173.
  9. (joint with L. Braun, J. Moraga, S. Filipazzi), The Jordan property for local fundamental groups, Geometry & Topology 26-1 (2022), 283–319. DOI: 10.2140/gt.2022.26.283.
  8. (joint with G. Di Cerbo), Birational boundedness of low dimensional elliptic Calabi-Yau varieties with a section, Compos. Math. 157 (2021), no. 8, 1766–1806. DOI: 10.1112/S0010437X2100717X.
  7. (joint with W. Chen, G. Di Cerbo, J. Han, and C. Jiang), Birational boundedness of rationally connected Calabi-Yau threefolds, Adv. Math., 378 (2021), 107541, 32 pp., DOI: 10.1016/j.aim.2020.107541
  6. (joint with S. Filipazzi), Invariance of plurigenera and boundedness for generalized pairs, Mat. Contemp. 47 (2020), 114–150, Proceedings of the ICM Satellite “Moduli spaces in Algebraic Geometry and Applications”, Campinas, Brazil 2018, DOI: 10.21711/231766362020/rmc476
  5. Hyperbolicity for log canonical pairs and the Cone Theorem, Sel. Math. New Ser. (2019), no.5, paper 67, 23 pp., DOI: 10.1007/s00029-019-0512-9.
  4. (joint with J. V. Pereira), Effective algebraic integration in bounded genus, Algebraic Geometry 6 (4) (2019) 454–485, DOI:10.14231/AG-2019-021.
  3. (joint with A. Fanelli, G. Codogni, and L. Tasin), A note on the fibres of Mori fibre spaces, Eur. J. Math. 4 (2018), no. 3, 859–878, DOI:10.1007/s40879-018-0219-z.
  2. (joint with M. Brown, J. McKernan, H. R. Zong), A geometric characterization of toric varieties, Duke Math. J., Volume 167, Number 5 (2018), 923–968, DOI:10.1215/00127094-2017-0047.
  1. (joint with G. Codogni, A. Fanelli, L. Tasin), Fano varieties in Mori fibre spaces, Int. Math. Res. Not., Volume 2016, Issue 7: 2026–2067, DOI:10.1093/imrn/rnv173.

### Pre-prints

- 
11. (joint with H. Liu), Rational curves and strictly nef divisors on Calabi–Yau threefolds, submitted, 18 pp., arXiv:2010.12233.
  12. (joint with S. Filipazzi), On the connectedness principle and dual complexes for generalized pairs, submitted, 48 pp., arXiv:2010.08018.
  13. (joint with C. Birkar, G. Di Cerbo), Boundedness of elliptic Calabi–Yau varieties with a rational section, submitted, 44 pp., arXiv:2010.09769.

14. (joint with C. Spicer) Effective generation for foliated surfaces: results and applications, submitted, 32 pp., arXiv:2104.11540.
15. (joint with J. Moraga), A characterization of toric singularities, 57 pp., arXiv:2108.01717.
16. (joint with S. Filipazzi, C. Hacon), Boundedness of elliptically fibered Calabi–Yau threefolds, submitted, 49pp, arXiv:2112.01352.

---

### Surveys

17. On the structure of local and global singularities: Shokurov’s Conjecture, Proceedings for the Kinoshita algebraic geometry symposium 2017, 12 pages, available electronically on the Kyoto University Research Information Repository.
18. Recent progress on the birational geometry of foliations on threefolds, Oberwolfach Reports 17 (2020), no. 2/3, 1002–1006 DOI: 10.4171/OWR/2020/19

### INVITED TALKS

---

#### Invited lectures series

- |   |         |
|---|---------|
| Boundedness for foliated surfaces,<br>Final conference of the ANR Project Foliage, Quimper, France. | 03.2022 |
| A geometric characterization of toric varieties, BAGS, Université de Lorraine.                      | 03.2018 |

---

#### Colloquia

- |  |         |
|--|---------|
| The geometry of projective varieties, online talk, SISSA, Trieste. | 04.2021 |
|--|---------|

---

#### Invited conference talks

- |  |         |
|--|---------|
| Minimal model program for foliated surfaces: a different approach.<br>Higher Dimensional Geometry in New York: Stability and Moduli, Simons Centre at Stony Brook.                 | 08.2022 |
| A geometric characterization of toric singularities and toric morphisms,<br>Birational Geometry Conference and 2022 meeting of the Swiss Mathematical Society, EPFL.               | 06.2022 |
| A characterization of toricness, 2021 Workshop on Algebraic Geometry: Generalised Pairs<br>and Applications, online conference, Chinese Academy of Sciences & Tsinghua University. | 08.2021 |
| Boundedness of elliptic fibrations,<br>Projective and birational higher dimensional geometry, online conference, Università di Trieste   | 04.2021 |
| Recent progress on the birational geometry of foliations on threefolds,<br>Algebraic Geometry: Moduli Spaces, Birational Geometry and Derived Aspects, MFO Oberwolfach.            | 07.2020 |
| Minimal Model Program for foliations on threefolds and applications,<br>Geometry and Dynamics of Foliations, online conference, CIRM.  | 05.2020 |
| Birational boundedness of elliptic Calabi-Yau varieties,<br>Workshop on the geometry of elliptic fibrations & COW Seminar, University of Warwick.                                  | 02.2020 |
| A geometric characterization of toric morphisms,<br>From Trento to Geometry and back, Università di Trento.  | 12.2019 |
| Birational boundedness of elliptic Calabi-Yau varieties,<br>Moduli and stability conditions, Leibniz Universität Hannover.   | 07.2019 |
| Birational boundedness of elliptic Calabi-Yau varieties,<br>Western Algebraic Geometry Symposium, UC Berkeley.   | 04.2019 |
| Towards birational boundedness of elliptic Calabi-Yau varieties, short communication<br>Moduli spaces in Algebraic Geometry and applications, ICM Satellite Conference, Campinas.  | 07.2018 |
| On the birational boundedness of the bases of elliptically fibered Calabi-Yau<br>manifolds in low dimension, Geometry and Physics of F-theory, BIRS.                               | 01.2018 |
| On the geometry of Calabi-Yau varieties in low dimension,<br>Korean-Italian Meeting on Algebraic Geometry 2018, KIAS, Seoul.   | 01.2018 |

Global vs. Local structure of singularities, Kinosaki Algebraic Geometry Conference, Japan.	10.2017
Log birational boundedness of Calabi-Yau pairs, Workshop on Fano varieties and Calabi-Yau varieties, Kobe University.	01.2017
Log birational boundedness of Calabi-Yau pairs, Birational Geometry and Characteristic $p > 0$ , CIRM, Marseille.	09.2016
A geometric characterization of toric varieties, Giornate di Geometria Algebrica ed Argomenti Correlati XXIII, Università di Catania.	05.2016
Adjoint dimension of foliations, Cambridge–Tokyo Workshop, I, University of Cambridge.	11.2015
Hyperbolicity for log pairs, Postgraduate Conference in Complex Geometry, University of Cambridge.	09.2015
Hyperbolicity for log pairs, Distribution of Rational and Holomorphic Curves in Algebraic Varieties, Bir.	03.2015
A geometric characterization of toric varieties, The Geometry of Algebraic Varieties, AMS Sectional Meeting, Michigan State.	03.2015
A geometric characterization of toric varieties, Geometria e Rappresentazioni nella Capitale, II, Università degli Studi Roma 3.	12.2014

---

#### Invited seminar talks

Algebraic Geometry Seminar, Universiteit van Amsterdam.	06.2022
Seminario di Geometria, Università di Roma Tre.	04.2022
Seminario di Geometria, Università di Roma Tor Vergata.	04.2022
Seminario di Algebra e Geometria, Sapienza Università di Roma.	04.2022
Explicit Birational Geometry Seminar, Fudan University.	02.2022
Algebraic Geometry Seminar, Columbia University.	01.2022
Oberseminar: Algebra, Zahlentheorie und algebraische Geometrie, online talk, Albert-Ludwigs-Universität Freiburg.	07.2021
Algebraic Geometry seminar, online talk, University of Kansas.	04.2021
Algebraic Geometry Seminar, online talk, Université de Bordeaux.	04.2021
Dutch online Algebraic Geometry seminar, online talk, Universiteit van Amsterdam.	03.2021
Algebraic Geometry Seminar, online talk, University of Utah.	02.2021
Algebraic Geometry Seminar, online talk, UC San Diego.	01.2021
Iskovskikh Seminar (online), Steklov Mathematical Institute, Moscow.	11.2020
Algebraic Geometry Seminar, online talk, Ohio State University.	11.2020
Algebraic Geometry Seminar, online talk, Max Planck Institute, Bonn.	05.2020
Algebraic Geometry Seminar, University of Princeton.	03.2020
KCL/UCL Geometry seminar, University College London.	02.2020
Seminario di Geometria Algebrica, Università di Torino.	03.2019
Edinburgh Geometry Seminar, University of Edinburgh.	03.2019
Séminaire d'homotopie en géométrie algébrique, Université de Toulouse.	01.2019
Oberseminar Algebraische Geometrie, Universität des Saarlandes.	11.2018
Algebraic Geometry Seminar, Max Planck Institute, Bonn.	10.2018
Groups, Arithmetic & Algebraic Geometry Seminar, EPF Lausanne.	09.2018
Seminario di Geometria Algebrica, Università di Trento.	05.2018

Geometry and Mathematical Physics seminar, Loughborough University.	05.2018
Warwick Algebraic Geometry Seminar, University of Warwick.	05.2018
Algebraic Geometry Seminar, UC San Diego.	04.2018
Algebraic Geometry Seminar, University of Utah.	04.2018
Algebraic Geometry Seminar, Princeton.	03.2018
Math-Physics Joint Seminar, UPenn.	03.2018
Mathematics–String Theory Seminar, IPMU, Tokyo.	10.2017
Algebraic Geometry Seminar, University of Tokyo.	10.2017
Log birational boundedness of Calabi-Yau pairs, BICMR, Beijing.	10.2017
Algebraic Geometry Seminar, University of Oslo.	04.2017
Seminario di Geometria Algebrica, SISSA, Trieste.	03.2017
Algebraic Geometry Seminar, University of Cambridge	03.2017
Algebraic Geometry Seminar, University of Tokyo.	01.2017
Groups, Arithmetic & Algebraic Geometry Seminar, EPFL.	11.2016
Algebraic Geometry Seminar, UC San Diego.	11.2016
Seminario de Álgebra, IMPA, Rio de Janeiro.	03.2016
Algebraic Geometry Seminar, Princeton University.	03.2016
Algebraic Geometry Seminar, Columbia University.	03.2016
Geometry and Mathematical Physics seminar, Loughborough University.	02.2016
EDGE Seminar, University of Edinburgh.	01.2016
Geometry and Topology Seminar, Imperial College.	11.2015
Algebraic Geometry Seminar, University of Cambridge.	11.2015
Seminario di Geometria Algebrica, Università degli Studi di Pavia.	10.2015
CIRGET Seminar, UQAM, Montreal.	03.2015
Algebraic Geometry Seminar, Johns Hopkins University.	02.2015
Algebraic Geometry Seminar, UT Austin.	02.2015
Seminario di Geometria Algebrica, Università degli Studi Roma 3.	12.2014
Algebraic Geometry Seminar, UC San Diego.	05.2014

---

#### Contributed talks

Hyperbolicity for log pairs, AMS Summer Institute in Algebraic Geometry, Salt Lake City.	07.2015
--	---------

#### TEACHING

---

##### Teaching as a RTDB in Università degli Studi di Milano

Matematica Generale, 1st year service course for students of the degree in Biology.	Fall 2022
---	-----------

---

##### Teaching as an Instructor at EPFL

Complex Manifolds, Mathematics Master's course.	Spring 2022
Analysis I, 1st year Bachelor course.	Fall 2021
Analysis I, 1st year Bachelor course.	Fall 2020
Rings and modules, 3rd year Mathematics Bachelor course.	Fall 2019
Complex Manifolds, Mathematics Master's course.	Fall 2019

---

## Teaching as a Research Fellow at University of Cambridge

Positivity in Algebraic Geometry, Part III course.	Lent (Spring) 2018
Linear Series, Part III course.	Lent (Spring) 2017
Introduction to birational geometry, Minicourse in 6 lectures, part of the Ph.D. course “Topics in algebro-geometric stability”, SISSA, Trieste.	12/2016-1/2017

---

### Teaching as a College Lecturer at Churchill College

Groups, Rings and Modules. Supervisor for 10 students (25 hours).	Lent (Spring) 2019
Geometry 1B. Supervisor for 7 students (16 hours).	Lent (Spring) 2019
Groups 1A. Supervisor for 12 students (30 hours).	Michaelmas (Fall) 2018
Group, Rings and Modules. Supervisor for 9 students (26 hours).	Lent (Spring) 2018
Geometry 1B. Supervisor for 7 students (16 hours).	Lent (Spring) 2018
Linear Algebra 1B. Supervisor for 13 students (35 hours).	Michaelmas (Fall) 2017
Group, Rings and Modules. Supervisor for 8 students (16 hours).	Lent (Spring) 2017
Geometry 1B. Supervisor for 9 students (15 hours).	Lent (Spring) 2017
Group, Rings and Modules. Supervisor for 9 students (25 hours).	Lent (Spring) 2016
Geometry 1B. Supervisor for 10 students (16 hours).	Lent (Spring) 2016
Analysis 1B. Supervisor for 12 students (28 hours).	Michaelmas (Fall) 2015
Topology and Metric Spaces. Supervisor for 8 students (12 hours).	Michaelmas (Fall) 2015

---

### Teaching as a graduate student at MIT

18.095, Mathematics Lecture Series, Organizer and Recitation Leader.	IAP 2015
18.085, Computational Science and Engineering, Course Instructor.	Summer 2013
18.095, Mathematics Lecture Series, Organizer and Recitation Leader.	IAP 2013
18.02, Multivariable Calculus, Teaching Assistant.	Fall 2012
18.085, Mathematical Methods for Engineering, Grading Assistant and responsible for Office Hours.	Spring 2012
18.112, Complex Analysis, Grading Assistant and responsible for Office Hours.	Fall 2011
18.755, Lie Groups, Grading Assistant and responsible for Office Hours.	Fall 2011

---

### Teaching as an undergraduate student in Italy

Complex Analysis, Teaching Assistant, University of Rome 3.	Spring 2010
Calculus 1, Teaching Assistant, University of Rome 3.	Fall 2009
General topology, Teaching Assistant, University of Rome 3.	Spring 2009
General Mathematics for Biological Sciences, Teaching Assistant, University of Pavia.	Fall 2008

## STUDENT SUPERVISION

---

### Thesis supervision

<b>Linus Rösler</b> , MA Thesis, “The geometry of elliptic fibrations”, EPFL.	02.2021-09.2021
<b>Anaëlle Pfister</b> , BA project (equivalent to a bachelor’s thesis), “An introduction to toric geometry”, EPFL.	02.2021-06.2021
<b>Luca Nyckess</b> , BA project (equivalent to a bachelor’s thesis), “An introduction to complex manifolds and Hodge Theory”, EPFL.	02.2020-06.2020
<b>Simen Moe</b> , Part III essay (equivalent to a master’s thesis), “An introduction to the Minimal Model Program”, University of Cambridge.	12.2018-05.2019

---

### Study projects supervision

<b>Alberto Smailovic Funcasta</b> , BA one semester study project, “Introduction to algebraic structures: from groups to modules”, EPFL.	02.2022-06.2022
<b>Linus Rösler</b> , MA project (one semester project), “Elliptic surfaces in Algebraic Geometry”, EPFL.	09.2020-12.2020
<b>Maxime Matthey</b> , MA project (one semester project), “Advanced topics in Commutative Algebra: Completions”, EPFL.	09.2020-12.2020

<b>Gheehyun Nahm</b> , Study project for an undergraduate student on advanced topics in Algebraic Geometry, University of Cambridge.	08.2018-03.2019
<b>Leon Zhang</b> , Direct Reading Program, Supervisor for an undergraduate student learning Hodge Theory, MIT.	IAP 2015
<b>Minseon Shin</b> , Direct Reading Program, Supervisor for an undergraduate student learning Scheme Theory, MIT.	IAP 2013

---

#### Thesis committee participation

<b>Peter Simko</b> , “Fano varieties”, Master thesis, EPFL.	07.2017
---	---------

### ORGANIZATION OF CONFERENCES, SEMINARS AND WORKSHOPS

---

#### Conferences and workshops

<i>Foliations in Algebraic and Birational Geometry</i> , 5 days workshop (team of 4), Bernoulli Center for Fundamental Studies, Lausanne, Switzerland.	09.2022
<i>Basel-Dijon-EPFL Workshop</i> , two-day workshop, (team of 2), Lausanne, Switzerland.	05.2022
<i>Basel-Dijon-EPFL Workshop</i> , two-day workshop, (team of 5), Basel, Switzerland.	11.2021
<i>Basel-Dijon-EPFL Workshop</i> , two-day workshop, (team of 4), Lausanne, Switzerland.	11.2019
<i>Cambridge-Tokyo Algebraic Geometry Workshop, III</i> , two-day workshop, (team of 4), Cambridge, UK.	12.2018
<i>New advances in Fano manifolds</i> , five-day school for Ph.D. students, (team of 4), Cambridge, UK.	12.2017
<i>British Algebraic Geometry</i> , three-day conference, (local organizer), Cambridge, UK,	09.2017
<i>Cambridge-Tokyo Algebraic Geometry Workshop, II</i> , two-day workshop, (team of 4), Cambridge, UK.	03.2017
<i>MIT-RTG Mirror Symmetry Workshop</i> , five-day workshop, (team of 6), Big Bear Lake, CA.	05.2013

---

#### Seminars

Organizer for the Groups, Arithmetic & Algebraic Geometry Seminar, EPFL.	07.2019-present
Organizer for the Algebraic Geometry Seminar, University of Cambridge.	10.2017-06.2019

### OUTREACH ACTIVITIES

---

HE+ Masterclass, Churchill College, Cambridge	04.2019
<i>I gave a lecture on modern geometry and organized an exercise session for high school students.</i>	
Open days, Churchill College, Cambridge	07.2018
<i>I gave a lecture on symmetries and geometry and organized an exercise session for high school students.</i>	
Orientation for high-school students, Liceo Classico “G. Prati”, Trento	04.2012
<i>I spoke to high school students about what are the challenges of becoming a maths student starting from a background in humanities.</i>	

### ACADEMIC SERVICES

---

#### Refereeing and reviewing activity

<b>Referee for academic journals:</b> (unless otherwise stated, 1 report per journal)	Since 2015
Mathematics Research Letter, Michigan Journal of Mathematics, International Mathematics Research Notices (3 reports, 1 short opinion), Mathematische Annalen, Annali della Scuola Normale Superiore di Pisa (1 short opinion), Journal of Algebraic Geometry (1 report, 2 short opinions), Inventiones Mathematicae, International Journal of Mathematics, Manuscripta Mathematica, Advances in Mathematics (2 reports), Transactions of the AMS, Annales de l'Institut Fourier, Journal of Differential Geometry, Proceedings of the LMS (1 short opinion), Advances in geometry, Forum Math Pi (1 short opinion), Journal of the LMS,	



Electronic Research Archive, Mathematische Zeitschrift.

<b>Referee for conference proceedings:</b> (by conference title) Groups of Automorphisms in Birational and Affine Geometry; Moduli of K-stable Varieties; Birational geometry, Kähler-Einstein metrics and degenerations.	Since 2013
--	------------

<b>Referee for grants and fellowships applications</b> submitted to the Engineering and Physical Sciences Research Council, UK (3 grants reviewed).	Since 09.2019
--	---------------

<b>Reviewer for Zentralblatt and Mathscinet</b> (7 reviews).	Since 2014
--	------------

---

#### **Mentoring activity**

Mentor for postgraduate students, Churchill College.	10.2017-06.2019
--	-----------------

Mentor for the students of the Institute of Mathematics, EPFL.	11.2020-present
--	-----------------

---

#### **Committee participation**

Admission Selection Interviews, Churchill College, Cambridge.	12.2018
---	---------

Postdoc Selection Committee for the Chair of Algebraic Geometry, EPFL.	02.2021 and 02.2022
--	---------------------

Doctoral students Selection Committee for the Chair of Algebraic Geometry, EPFL.	02.2022
--	---------

---

#### **LANGUAGES**

---

Italian: mother tongue.

English: professional proficiency.

French: intermediate level.

German: beginner level.

---

Last update: September 1st, 2022

## REFERENCES

---

Prof. James M<sup>c</sup>Kernan, FRS  
Ph.D. thesis advisor  
Department of Mathematics  
UC San Diego  
9500 Gilman Drive  
La Jolla, CA 92093-0112, USA  
+1 858 534-6347  
[http://www.math.ucsd.edu/~jmckerna/  
mckernan@math.ucsd.edu](http://www.math.ucsd.edu/~jmckerna/mckernan@math.ucsd.edu)

Prof. Paolo Cascini  
Research reference  
Department of Mathematics  
Imperial College, London  
676 Huxley Building  
London SW7 2AZ, UK  
+44 (0)20 7594 8861  
<https://www.imperial.ac.uk/people/p.cascini>  
[p.cascini@imperial.ac.uk](mailto:p.cascini@imperial.ac.uk)

Prof. Caucher Birkar, FRS  
Research reference  
DPMMS  
University of Cambridge  
Wilberforce Road  
Cambridge CB3 0WB, UK  
+44 01223 765898  
[https://www.dpmms.cam.ac.uk/~cb496/  
cb496@dpmms.cam.ac.uk](https://www.dpmms.cam.ac.uk/~cb496/cb496@dpmms.cam.ac.uk)

Prof. Chenyang Xu  
Research reference  
Department of Mathematics  
Princeton University  
Fine Hall, Washington Road  
Princeton NJ 08544-1000 USA  
+1 609 258-4200  
[https://web.math.princeton.edu/~chenyang/  
chenyang@princeton.edu](https://web.math.princeton.edu/~chenyang/chenyang@princeton.edu)

Prof. Jorge Vitório Pereira  
Research reference  
Instituto Nacional de Matemática Pura e Aplicada  
Estrada Dona Castorina 110  
22460-320 - Rio de Janeiro - Brasil  
+55 21 25295220  
[http://w3.impa.br/~jvp/  
jvp@impa](http://w3.impa.br/~jvp/jvp@impa)

Prof. Zsolt Patakfalvi  
Research and teaching reference  
École polytechnique fédérale de Lausanne  
EPFL SB MATH CAG  
MA C3 635 (Bâtiment MA), Station 8  
CH-1015 Lausanne, Switzerland  
+41 21 693 55 20  
[http://cag.epfl.ch/  
zsolt.patakfalvi@epfl.ch](http://cag.epfl.ch/zsolt.patakfalvi@epfl.ch)