

UNIVERSITÀ DEGLI STUDI DI MILANO

selezione pubblica per n. 1 posto/i di Ricercatore a tempo determinato ai sensi dell'art.24, comma 3, lettera b) della Legge 240/2010 per il settore concorsuale 01/A2, settore scientifico-disciplinare MAT/03, presso il Dipartimento di Dipartimento di Matematica Federico Enriques, (avviso bando pubblicato sulla G.U. n. 46 del 11/06/2021) Codice concorso 4773

## Luca Schaffler CURRICULUM VITAE

(N.B. IL CURRICULUM NON DEVE ECCEDERE LE 30 PAGINE E DEVE CONTENERE GLI ELEMENTI CHE IL CANDIDATO RITIENE UTILI AI FINI DELLA VALUTAZIONE.

LE VOCI INSERITE NEL FACSIMILE SONO A TITOLO PURAMENTE ESEMPLIFICATIVO E POSSONO ESSERE SOSTITUITE, MODIFICATE O INTEGRATE)

### INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

|                 |  |
|-----------------|--|
| COGNOME         | SCHAFFLER  |
| NOME            | LUCA   |
| DATA DI NASCITA | 27/06/1988   |
| LINGUE          | ITALIANO (MADRELINGUA), INGLESE (FLUENTE, PARLATO E SCRITTO), SVEDESE (LIVELLO A1) |

### TITOLO DI STUDIO

(indicare la Laurea conseguita inserendo titolo, Ateneo, data di conseguimento, ecc.)

- Laurea Magistrale in Matematica, Università degli Studi Roma Tre, 07/2012, voto 110/110 e lode. Relatrice: Lucia Caporaso.
- Laurea Triennale in Matematica, Università degli Studi Roma Tre, 07/2010, voto: 110/110 e lode.

### TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO

(inserire titolo, ente, data di conseguimento, ecc.)

- Dottorato in Matematica, University of Georgia, 04/08/2017. Relatore: Valery Alexeev. Titolo riconosciuto equipollente (decreto allegato).

### CONTRATTI DI RICERCA, ASSEGNI DI RICERCA O EQUIVALENTI

(per ciascun contratto stipulato, inserire università/ente, data di inizio e fine, ecc.)

- Postdoc, KTH Royal Institute of Technology, 17/08/2020 - 17/08/2021. Mentore: Sandra Di Rocco.
- Marshall H. Stone Visiting Assistant Professor (postdoctoral position), University of Massachusetts Amherst, 01/09/2017 - 31/08/2020. Mentore: Jenia Tevelev.

## PUBBLICAZIONI SCIENTIFICHE

(per ciascuna pubblicazione indicare: nomi degli autori, titolo completo, casa editrice, data e luogo di pubblicazione, codice ISBN, ISSN, DOI o altro equivalente)

1. Luca Schaffler and Jenia Tevelev. Compactifications of moduli of points and lines in the projective plane. To appear in International Mathematics Research Notices. arXiv:2010.03519. Acceptance date: June 21, 2021.
2. Patricio Gallardo, Matt Kerr, and Luca Schaffler. Geometric interpretation of toroidal compactifications of moduli of points in the line and cubic surfaces. Advances in Mathematics 381, 16 April 2021. <https://doi.org/10.1016/j.aim.2021.107632>
3. Alessio Caminata, Noah Giansiracusa, Han-Bom Moon, and Luca Schaffler. Point configurations, phylogenetic trees, and dissimilarity vectors. Proceedings of the National Academy of Sciences of the United States of America (PNAS) March 23, 2021 118 (12). <https://doi.org/10.1073/pnas.2021244118>
4. Kuan-Wen Lai, Yu-Shen Lin, and Luca Schaffler. Decomposition of Lagrangian classes on K3 surfaces. To appear in Mathematical Research Letters. arXiv:2001.00202. Acceptance date: July 29, 2020.
5. Alessio Caminata and Luca Schaffler. A Pascal's theorem for rational normal curves. Bulletin of the London Mathematical Society. Appeared online: June 15, 2021. <https://doi.org/10.1112/blms.12511>
6. Han-Bom Moon and Luca Schaffler. KSBA compactification of the moduli space of K3 surfaces with a purely non-symplectic automorphism of order four. Proceedings of the Edinburgh Mathematical Society (2) 64 (2021), no. 1, 99-127. <https://doi.org/10.1017/S001309152100002X>
7. Alessio Caminata, Noah Giansiracusa, Han-Bom Moon, and Luca Schaffler. Equations for point configurations to lie on a rational normal curve. Advances in Mathematics 340 (2018), 653-683. <https://doi.org/10.1016/j.aim.2018.10.013>
8. Luca Schaffler. K3 surfaces with  $\mathbb{Z}_2^2$  symplectic action. Rocky Mountain Journal of Mathematics 48 (2018), no. 7, 2347-2383. <https://doi.org/10.1216/RMJ-2018-48-7-2347>
9. Luca Schaffler. On the cone of effective 2-cycles on  $\overline{M}_{0,7}$ . European Journal of Mathematics 1 (2015), no. 4, 669-694. <https://doi.org/10.1007/s40879-015-0072-2>
10. (Tesi dottorato) Luca Schaffler. The KSBA Compactification of a 4-dimensional Family of Polarized Enriques Surfaces. University of Georgia, 2017.

## PREPRINT SOTTOMESSI A RIVISTA

- Luca Schaffler. The KSBA compactification of the moduli space of  $D_{1,6}$ -polarized Enriques surfaces. Submitted, refereed, revised, awaiting final response. 2016, arXiv:1608.02564.

## ATTIVITÀ DIDATTICA A LIVELLO UNIVERSITARIO IN ITALIA O ALL'ESTERO

(inserire anno accademico, ateneo, corso laurea, numero ore, ecc.)

- (Il numero di ore specificato sotto si riferisce al numero di ore di lezione per settimana.)
- 2020/2021, Term 4, KTH Royal Institute of Technology, Intersection Theory and Moduli Spaces, PhD level reading course, 1 hour 30 minutes. Main instructor.
  - 2020/2021, Term 4, KTH Royal Institute of Technology, Discrete Mathematics, SF1610, 1 hour 30 minutes. Exercise leader.

- 2020/2021, Term 3, KTH Royal Institute of Technology, Calculus in One Variable, SF1685, 4 hours 30 minutes. Exercise leader.
- 2019/2020, Spring, University of Massachusetts Amherst, Multivariate Calculus, MATH 233, 2 hours 30 minutes. Main instructor.
- 2019/2020, Fall, University of Massachusetts Amherst, Fundamental Concepts of Mathematics (two sections), MATH 300, 5 hours. Main instructor.
- 2018/2019, Spring, University of Massachusetts Amherst, Fundamental Concepts of Mathematics, MATH 300, 2 hours 30 minutes. Main instructor.
- 2018/2019, Fall, University of Massachusetts Amherst, Introduction to Abstract Algebra I (two sections), MATH 411, 5 hours. Main instructor.
- 2017/2018, Spring, University of Massachusetts Amherst, Fundamental Concepts of Mathematics, MATH 300, 2 hours 30 minutes. Main instructor.
- 2017/2018, Fall, University of Massachusetts Amherst, Multivariate Calculus (two sections), MATH 233, 5 hours per week. Main instructor.
- 2014/2015, Spring, University of Georgia, Calculus I for Science and Engineering, MATH 2250, 3 hours 45 minutes. Main instructor.
- 2014/2015, Fall, University of Georgia, Precalculus, MATH 1113, 2 hours 30 minutes. Main instructor.

#### CONSEGUIMENTO DI PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA E INSEGNAMENTO

*(inserire premio, data, ente organizzatore, ecc.)*

- Dissertation Completion Award, 2016, University of Georgia.
- William Armor Wills Memorial Scholarship Award, 2016, University of Georgia.
- Outstanding Teaching Assistant Award, 2016, from the University of Georgia.

#### FONDI RICEVUTI

- Research Support Fund, Massachusetts Society of Professors, Academic Year 2019-2020, \$1000.
- Research Support Fund, Massachusetts Society of Professors, Academic Year 2018-2019, \$1000.
- Marshall H. Stone Visiting Assistant Professor travel funding, \$2000 per academic year, 2017-2020.

#### ATTIVITÀ DI RELATORE A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI

*(inserire titolo congresso/convegno, data, ecc.)*

- (Invited) Hodge Theory, Arithmetic and Moduli II, Texas A&M University, College Station, February 8, 2020.
- (Invited) PIMS Symposium on Hodge Theory, Arithmetic and Moduli, University of British Columbia, Vancouver, May 15, 2019.
- (Invited) BATMOBYLE, Amherst College, Amherst, May 2, 2019.

- (Invited) Hodge Theory, Moduli and Representation Theory, Stony Brook University, August 17, 2017.
- (Invited) Workshop on Algebraic Varieties, Hodge Theory and Motives, Fields Institute, Toronto, March 12, 2017.
- (Invited) Focused Research Group on Hodge Theory, Moduli and Representation Theory: Workshop VIII, Washington University in St. Louis, St. Louis, January 8, 2017.
- Joint Mathematics Meetings, AMS Contributed Paper Session on Algebraic Geometry, Atlanta, January 6, 2017.
- (Invited) American Institute of Mathematics, Workshop on Positivity of Cycles, San Jose, August 4, 2016.
- (Invited) "Giornate di Geometria Algebrica ed Argomenti Correlati XIII", University of Catania, Catania, Italy, May 25, 2016.

## POSTER PRESENTATI A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI

*(inserire titolo congresso/convegno, data, ecc.)*

- AGNES, Stony Brook University, online, October 24, 2020. Title: Compactifications of moduli of points and lines in the projective plane.
- Ideals, Varieties, Applications: Celebrating the Influence of David Cox, Amherst College, June 11, 2019. Title: A Pascal's theorem for rational normal curves.
- AGNES, Brown University, September 22, 2018. Title: Compactifications of moduli spaces of points and lines.
- Birational Geometry and Moduli Spaces, INdAM, June 14, 2018. Title: Compactifications of moduli spaces of points and lines.
- AGNES, Northeastern University, October 14, 2017. Title: K3 surfaces with  $\mathbb{Z}_2^2$  symplectic action.
- AGNES, University of Massachusetts Amherst, November 5, 2016. Title: The KSBA compactification of the moduli space of  $D_{1,6}$ -polarized Enriques surfaces.
- WAGS, Colorado State University, October 15, 2016. Title: The KSBA compactification of the moduli space of  $D_{1,6}$ -polarized Enriques surfaces.
- AGNES, Brown University, October 3, 2015. Title: On the cone of effective 2-cycles on  $\bar{M}_{0,7}$ .

## SEMINARI SU INVITO

- Tata Institute of Fundamental Research, Colloquium, online, January 22, 2021.
- University of California Riverside, UC Riverside Algebraic Geometry Seminar, online, January 19, 2021.
- University of California Riverside - Washington University in St. Louis, Mini-Seminar on Compactifications, online, October 1, 2020.
- University of Georgia, Algebraic Geometry Seminar, online, September 30, 2020.

- Rutgers University, Algebra Seminar, online, April 29, 2020.
- KTH Royal Institute of Technology, Fika webinar, online, April 23, 2020.
- Texas A&M University, Algebra and Combinatorics Seminar, College Station, February 7, 2020.
- Washington University in St. Louis, Algebraic Geometry Seminar, St. Louis, January 15, 2020.
- Pontificia Universidad Católica de Chile, Algebraic Geometry Seminar, Santiago, January 8, 2020.
- Duke University, Algebraic Geometry Seminar, Durham, August 30, 2019.
- Sapienza University of Rome, Algebra and Geometry Seminar, Rome, June 26, 2019.
- Washington University in St. Louis, Algebraic Geometry Seminar, St. Louis, February 27, 2019.
- University of Connecticut, Algebra Seminar, Storrs, November 14, 2018.
- Universitat de Barcelona, Barcelona Algebraic Geometry Seminar, Barcelona, June 8, 2018.
- Yale University, Yale Algebraic and Tropical Geometry Seminar, April 26, 2018.
- Northeastern University, Geometry, Physics, and Representation Theory Seminar, April 5, 2018.
- Stony Brook University, Algebraic Geometry Seminar, October 4, 2017.
- Colorado State University, FRAGMENT seminar, Fort Collins, May 4, 2017.
- Nagoya University, Algebraic Geometry Seminar, Nagoya, April 17, 2017.
- Kyoto University, Algebraic Geometry Seminar, Kyoto, April 14, 2017.
- Duke University, Algebraic Geometry Seminar, Durham, February 17, 2017.
- Leibniz Universität Hannover, Research Seminar Algebraic Geometry, Hannover, Germany, December 21, 2016.
- University of Utah, Algebraic Geometry Bootcamp, research group talk, Salt Lake City, July 2015.
- Roma Tre University, Algebraic Geometry Seminar, Rome, Italy, June 4, 2015.

#### PARTECIPAZIONE A CONFERENZE E WORKSHOP

- K3 surfaces and hyperkähler manifolds, Università degli Studi di Milano, online, June 9, 2021.
- AGNES, Stony Brook University, online, October 23-25, 2020.
- Hodge Theory, Arithmetic and Moduli II, Texas A&M University, College Station, February 8-9, 2020.
- AGNES, Boston College, Chestnut Hill, September 20-22, 2019.
- Ideals, Varieties, Applications: Celebrating the Influence of David Cox, Amherst College, Amherst, June 10-14, 2019.

- PIMS Symposium on Hodge Theory, Arithmetic and Moduli, University of British Columbia, Vancouver, May 13-17, 2019.
- Recent Progress in Moduli Theory, MSRI, Berkeley, May 6-10, 2019.
- BATMOBYLE, Amherst College, Amherst, May 2, 2019.
- AGNES, University of Massachusetts Amherst, Amherst, March 22-24, 2019.
- AGNES, Brown University, Providence, September 21-23, 2018.
- Combinatorial Algebraic Geometry Retrospective Workshop, Fields Institute, Toronto, June 18-22, 2018.
- Birational Geometry and Moduli Spaces, INdAM, Rome, June 11-15, 2018.
- AGNES, Rutgers University, New Brunswick, April 13-15, 2018.
- Georgia Algebraic Geometry Symposium, Georgia Institute of Technology, Atlanta, February 23-25, 2018.
- AGNES, Northeastern University, Boston, October 13-15, 2017.
- Conference on Birational Geometry, Simons Foundation, New York, August 21-25, 2017.
- Hodge Theory, Moduli and Representation Theory, Stony Brook University, August 14-18, 2017.
- Workshop on Algebraic Varieties, Hodge Theory and Motives, Fields Institute, Toronto, March 9-12, 2017.
- Georgia Algebraic Geometry Symposium, University of Georgia, Athens, March 3-5, 2017.
- Joint Mathematics Meetings, Atlanta, January 4-7, 2017.
- Thematic Program on Combinatorial Algebraic Geometry, Workshop on Combinatorial Moduli Spaces and Intersection Theory, Fields Institute, Toronto, December 5-9, 2016.
- AGNES, University of Massachusetts Amherst, Amherst, November 4-6, 2016.
- WAGS, Colorado State University, Fort Collins, October 15-16, 2016.
- Georgia Summer Workshop in Algebraic Geometry, University of Georgia, Athens, August 27-28, 2016.
- Positivity of Cycles, American Institute of Mathematics, San Jose, California, August 1-5, 2016.
- Thematic Program on Combinatorial Algebraic Geometry, Graduate Summer School on Combinatorial Algebraic Geometry, Fields Institute, Toronto, July 18-22, 2016.
- "Giornate di Geometria Algebrica ed Argomenti Correlati XIII", University of Catania, Italy, May 25-28, 2016.
- Spring Southeastern Sectional Meeting, University of Georgia, Athens, March 5-6, 2016.
- Georgia Algebraic Geometry Symposium, Emory University, Atlanta, October 23-25, 2015.
- AGNES, Brown University, Providence, October 2-4, 2015.

- Summer Research Institute on Algebraic Geometry, University of Utah, Salt Lake City, July 13-24, 2015.
- The Graduate Students Bootcamp for the 2015 Algebraic Geometry Summer Research Institute, University of Utah, Salt Lake City, July 6-10, 2015.
- Georgia Algebraic Geometry Symposium, University of Georgia, Athens, October 17-19, 2014.
- Graduate Workshop on Moduli of Curves, Simons Center, Stony Brook University, July 7-18, 2014.
- Georgia Algebraic Geometry Symposium, University of Georgia, Athens, October 18-20, 2013.
- Advanced Course "Compactifying Moduli Spaces", Centre de Recerca Matemàtica, Barcelona, May 27-31, 2013.

#### ESPERIENZA DI ORGANIZZAZIONE

- I organized the poster session for the conference AGNES in UMass Amherst, March 2019.

#### REFERAGGIO E RECENSIONE

- Referee for AMS Book Program, International Symposium on Symbolic and Algebraic Computation (ISSAC), and Mathematische Zeitschrift.
- Referee for AMS Book Program, 2019 - today.

#### COINVOLGIMENTO CON LA COMUNITÀ

UGA High School Math Tournament, 2016.

- The day of the tournament I helped with registration, proctoring, and grading.
- I designed the picture on the tournament T-shirt.
- I drew most of the pictures for the tournament problems.
- I helped with writing test problems and solutions.

UGA High School Math Tournament, 2015. I helped with writing test problems and solutions.

Data

05/07/2021

Luogo

Aprilia