

Jemma Lorenat
Pitzer College
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EDUCATION

PhD, Mathematics (2010 – 2015)

Simon Fraser University (Canada) and Université Pierre et Marie Curie (France)
Doctoral programs in mathematics at the Department of Mathematics at SFU and at
the Institut de mathématiques de Jussieu, Paris Rive Gauche at UPMC

Thesis: “Die Freude an der Gestalt: Methods, Figures, and Practices in Early
Nineteenth Century Geometry.”

Advisors: Prof. Thomas Archibald and Prof. Catherine Goldstein

MA, Liberal Studies (2008 – May 2010)

City University of New York Graduate Center

Thesis: “The development and reception of Leopold Kronecker’s philosophy of
mathematics”

BA (Summa Cum Laude), Mathematics (2005 – May 2007)

San Francisco State University

Undergraduate Studies (2004 – 2005)

University of St Andrews, St Andrews, Scotland

EMPLOYMENT

2015 – Present, Pitzer College (Claremont, CA), Assistant Professor of Mathematics

2013 – 2015, Pratt Institute (Brooklyn), Visiting Instructor

2013 – 2015, St Joseph’s College (Brooklyn), Visiting Instructor

2010 – 2012, Simon Fraser University, Teaching Assistant

2009 – 2010, College Now, Hunter College (New York), Instructor

2007 – 2010, Middle Grades Initiative, City University of New York

PUBLISHED RESEARCH

“Certain modern ideas and methods: “geometric reality” in the mathematics of
Charlotte Angas Scott” *Review of Symbolic Logic* (forthcoming).

“Actual accomplishments in this world: the other students of Charlotte Angas Scott”
Mathematical Intelligencer (forthcoming).

“Je ne point ambitionnée d’être neuf: modern geometry in early nineteenth-century
French textbooks” *Interfaces between mathematical practices and mathematical education* ed.
Gert Schubring. Springer, 2019, pp. 69–122.

“Radical, ideal and equal powers: naming objects in nineteenth century geometry”

Revue d'histoire des mathématiques 23 (1), 2017, pp. 71–123.

“Modern and pure: teaching geometry in early twentieth-century women’s colleges” *Women in Mathematics: 100 Years and Counting* ed. Beery, Greenwald, Jensen-Vallin, and Mast. Springer, 2017, pp. 305 – 344.

“The greatest geometer since the time of Apollonius” *Mathematical Intelligencer* 39(3), September 2017, pp. 46 – 52.

“Synthetic and analytic geometries in the publications of Jakob Steiner and Julius Plücker (1827–1829)” *Archive for History of Exact Sciences* 70(4), June 2016, pp. 413 – 462.

“Polemics in public: Poncelet, Gergonne, Plücker, and the Duality Controversy” *Science in Context* 28(4), December 2015, pp. 545 – 585.

“Figures real, imagined and missing in Poncelet, Plücker, and Gergonne” *Historia Mathematica* 42(2), 2014, 155 – 192.
<http://www.sciencedirect.com/science/article/pii/S0315086014000767>

“Not set in stone: nineteenth century geometrical constructions and the Malfatti Problem” *BSHM Bulletin: Journal of the British Society for the History of Mathematics* 27(3), 2012, 169 – 180.
<http://www.tandfonline.com/doi/full/10.1080/17498430.2012.676962>

EDITING AND REVIEWS

Column Editor, “Years Ago” *Mathematical Intelligencer* (vols. 39 and following)

“Book Review: *A Richer Picture of Mathematics*, David Rowe” *Notices of the American Mathematical Society* (forthcoming).

“Book Review: *Pushing Limits*, Ted Hill” *Historia Mathematica* 45(3), 2018, 304–305.

“Analyses d’Ouvrages: Lise Bioesmat-Martagon (éd.) *Éléments d’une biographie de l’Espace géométrique*” *Revue d’histoire des sciences* 69(2), 2016, 403–405.

“Book Review: *Sciences Mathématiques 1750–1850: continuités et ruptures*, Christian Gilain, Alexandre Guilbaud (eds.)” *Historia Mathematica* 43(4), 2016, 446–449.

CONFERENCE PAPERS AND INVITED TALKS

Mathematics in Practice Conference, Stanford, May 2019: “What is the use of a book without pictures?”

Workshop on duality as an archetype of mathematical thinking, Centre International de Rencontres Mathématiques, Luminy, March 2019: “Marching two-by-two: the progress of duality in geometry during the early nineteenth-century.”

The Mathematical Association of America Golden Section, San Jose, February 2019: “Demands upon your imagination: developing mental images in nineteenth-century pure geometry.”

International Congress of Mathematics, International Commission in the History of Mathematics Symposium, Rio, August 2018: “Demands upon your imagination: developing mental images in nineteenth-century pure geometry.”

Workshop on Modernism in Geometry: Scott and Hilbert, Université Denis Diderot, Paris, June, 2018: “Certain Modern Ideas: the history, mathematics, and philosophy of Charlotte Angas Scott.”

University of California Los Angeles, History of Science Seminar, June 2018: “Certain Modern Ideas: the history, mathematics, and philosophy of Charlotte Angas Scott.”

CIRMATH Americas, University of Virginia, May 2018: “Mathematics for Philosophers: *The Monist* from 1890 to 1906.”

Anachronism(s) in the History of Mathematics: The Seventh Biennial Bacon Conference, California Institute of Technology, April 2018: “Portraying Projective Geometry: The Presence and Absence of Measurement in Nineteenth Century Pure Geometry.”

Claremont Center for the Mathematical Sciences Colloquium, February 2018: “Certain Modern Ideas and Methods. A look at the history and philosophy of Charlotte Angas Scott.”

Sonia Kovalevsky Mathematics Day 2018 Keynote Address, Pomona College, February 2018: “First, but not last. Charlotte Angas Scott and the history of women in mathematics.”

Southern California History and Philosophy of Logic and Mathematics Group, UC Riverside, January 2018: “Algebraic symbols and geometrical reality in the writings of Charlotte Angas Scott.”

AMS/MAA Joint Meeting, San Diego, January 2018 (Special session on alternative proofs in mathematics): “Algebraic symbols and geometrical reality: the algebraic geometry of Charlotte Angas Scott.”

Atul Vyas Memorial lecture in mathematics, Claremont McKenna College, November 2017: “Making Sense: A Historical Exploration of Intuition in Mathematics.”

California State University, Fullerton Mathematics Colloquium, November 2017: “Polemics in Public: the principle of duality in early nineteenth-century geometry.”

Association for Women in Mathematics, Los Angeles, April 2017: “Certain Modern Ideas and Methods: Charlotte Angas Scott’s Philosophy of Mathematics.”

Philadelphia Area Society for the History of Mathematics, Villanova, December 2016: “*Anschauliche Geometrie* in 1832: Jakob Steiner, the illustrated figure, and the imagination.”

Colorado State University History of Mathematics Seminar, Fort Collins, November 2016: “Defining Generality in Modern Pure Geometry: radical axes, ideal common chords, and lines of equal powers.”

AMS/MAA Joint Meeting, Seattle, January 2016 (Invited session on the history of mathematics): “Vorstellungskraft without sensory media.”

HSS Annual Meeting, San Francisco, November 2015. Roundtable on diagrammatic notational systems: “Jakob Steiner’s virtual geometry.”

Doing Mathematics in Different Cultural Contexts, A Conference in honor of Judith V. Grabiner, Pitzer College, Claremont, October 2015: “Radical, ideal and equal powers: Renaming Points and Lines in Modern Geometry.”

Colloque “1750–1850 : ruptures et continuités en géométrie” Nancy, June 2015: “Examining the opposition between synthetic and analytic geometry in the early research of Jakob Steiner and Julius Plücker.”

AMS/MAA Joint Meeting, San Antonio, January 2015 (Invited session on the history of mathematics): “Polemics in public: Controversies around the principle of duality in early nineteenth century geometry.”

HSS Annual Meeting, Chicago, November 2014. Session Organizer jointly with Abram Kaplan on Evidence in Mathematics: “The figure and other forms of geometric evidence.”

AMS/MAA Joint Meeting, Baltimore 2014 (Invited session on the history of mathematics): “Julius Plücker’s Pure Geometry.”

CMS Winter Meeting, Ottawa, Canada 2013: “Julius Plücker’s Pure Geometry.”

Algèbre, géométrie et théorie des nombres aux XVIIIe et XIXe siècles, Université de Nantes, France 2013: “Concentric circles’ common chord at infinity.”

Seminaire d’histoire des sciences mathématiques de l’Institut de mathématiques de Jussieu, Paris, France 2013: “Conic sections and polygons in the *Annales de Gergonne*.”

Novembertagung on the history of mathematics, Wuppertal, Germany 2012: “A geometry by any other name.”

Séminaire d'histoire des mathématiques d'Institut Henri Poincaré, Paris, France
2012: "Posed problems and solutions in Gergonne's Annales and Crelle's Journal."

Three-Society History of Science Meeting, Philadelphia, 2012: "From research to recreation, posed problems in 19th century journals."

International Conference on the History of Modern Mathematics, Xi'an, China 2012:
"From research to recreation, posed problems in 19th century journals."

AMS/MAA Joint Meeting, Boston 2012 (Invited paper, Special session in the history of mathematics): "Not set in stone: 19th century geometrical constructions and the Malfatti Problem."

CMS Winter Meeting, Toronto, Canada 2011: "Not set in stone: 19th century geometrical constructions and the Malfatti Problem."

Novembertagung on the history of mathematics, Paris, France 2011: "Poor Steiner's Porism."

Association for the Philosophy of Mathematical Practice Symposia, Nancy, France 2011: "Kronecker's Constructs."

AMS/MAA Joint Meeting, New Orleans 2011: "How Kroneckerian Became an Adjective."

Novembertagung on the history of mathematics, Mainz, Germany 2010: "How Kroneckerian Became an Adjective."

ACADEMIC SERVICE

Organizer, Claremont History and Philosophy of Mathematics Seminar (2016 – present). <http://pzacad.pitzer.edu/math/PhilosophySeminar/HOMsem.html>

Co-organizer, Joint Mathematics Meeting History of Mathematics Seminar (January 2018, January 2019)

Co-organizer, The Orange County and Inland Empire Seminar in the History and Philosophy of Mathematics and Logic (2017 – present).

Coordinator, Gateway for Exploring Mathematical Sciences (2015 – 2017).
<http://ccms.claremont.edu/GEMS>

AWARDS

Maria Gaetana Agnesi Prize Third Centennial Prize (2018)

Montucla Prize, International Commission for the History of Mathematics (2017)

National Science Foundation Grant, Mathematisches Forschungsinstitut Oberwolfach (2016)

Graduate Travel Grant, American Mathematical Society (2014)

National Science Foundation Travel Grant, History of Science Society (2014)

Graduate International Research Award, Simon Fraser University (2012)
Leibniz Scholar, Mathematisches Forschungsinstitut Oberwolfach (2012)
Graduate Fellowship, Simon Fraser University (2011, 2012)
Mathematics Student Teaching Award, Simon Fraser University (2011)
Philip Morrison Fellow, American Assoc. for the Advancement of Science (2011)
Department Graduate Entrance Scholarship, Simon Fraser University (2010)
Mathematics Departmental Honoree, San Francisco State University (2007)

ILLUSTRATIONS

Cover illustration,

Mathematical Intelligencer 39(3), 2017

Mathematical Intelligencer 40(3), 2018

Series of mathematicians' portraits drawn for the presentation, "How Kroneckerian Became an Adjective," for the AMS/MAA Joint Meeting in 2011.

Mathematician Portrait Gallery, MAA Mathematical Sciences Digital Library

<http://www.maa.org/publications/periodicals/convergence/portrait-gallery>