

CURRICULUM VITAE – LEO S. HERR

PERSONAL INFORMATION	Leo S. Herr Math Ph.D. Student Colorado University Boulder Boulder, Colorado, 80309 leo.herr@colorado.edu
ABOUT ME	Currently a fifth-year graduate student at the University of Colorado Boulder. I've passed both the preliminary exams and the comprehensive exam. My research is in Deformation Theory and Log Geometry
EDUCATION	(In Progress) Doctorate in Mathematics from CU Boulder (2014 - 2019 Expected). Adviser: Jonathan Wise Bachelors in Mathematics and Philosophy from Stony Brook University (2011-2014).
RESEARCH	DEFORMATION THEORY Continuing and elaborating on work done separately by L. Illusie and J. Wise. There are several natural continuations of my first paper. <ul style="list-style-type: none">• <i>Deformations of Modules Through Butterflies and Gerbes</i>. arXiv link. Submitted. LOG GEOMETRY AND GROMOV-WITTEN THEORY The natural analogue of the moduli space of curves in log geometry begs several questions – what properties do virtual fundamental classes have in this context?
PUBLICATION(S)	Deformations of Modules Through Butterflies and Gerbes. arXiv link . Submitted.
TEACHING	Primary Instructor Calculus 2: Fall 2018; Calculus 1 : Fall 2015, Spring 2016, Spring 2017, Spring 2018 Assistant Teacher Calculus 2 : Fall 2016; Calculus 1 : Spring 2015; Finite Math : Fall 2014; Precalculus : Fall 2017
SEMINARS	Co-organized a seminar on ∞ -Categories for graduate students in order to read Jacob Lurie's <i>Higher Topos Theory</i> . (Spring 2016)

LEADERSHIP
INITIATIVES

Founding President of the local chapter of the AMS at CU Boulder. (2016-2018)

Co-ran study session series for graduate students to pass the Algebra Prelim (Fall 2014)

Teaching weekly high school and undergraduate extracurricular advanced math courses. Associated with Boulder Valley School District Mentor Program. Topics: Topology, Algebra, Differential Geometry, Category Theory, some Analysis. (Fall 2015 - Present)

Participated in the “[Portal to the Public](#)” Program, coordinated by [CU Science Discovery](#). (Fall 2017)

AWARDS

Research Experience for Graduates Summer Research (Summer 2015)

Graduate School Fellowship (Summer 2016)

Haller Fellowship – Summer Funding (Summer 2017)

Pre-Doctoral Fellowship (Fall 2017)

INVITED TALKS

To Be Determined on Log Gromov-Witten Invariants – AMS Special Session in Algebraic Geometry 2018 – Twenty-minute talk

Deformations of Modules – Topological Approaches in Algebraic Geometry (TAAAG) Fall 2016 – Ten-minute talk

Euler Characteristic in Pictures – Seminar Spring 2017 – Talk for graduate students in various STEM disciplines

Topological André-Quillen Cohomology – Talbot Summer 2017; CU Boulder Topology Research Seminar – Topological Enhancements of Deformation-Theoretic Tools

REFERENCES

- [Jonathan Wise](#) (Adviser)
CU Boulder
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- [Yano Casalaina-Martin](#)
CU Boulder
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