

David White

Curriculum Vitae

Department of Mathematics
North Carolina State University
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🌐 dave-white.github.io | 🐙 dave-white (GitHub)

EDUCATION

- 2017–present **Ph.D. (expected spring 2023)**, *North Carolina State University*, Raleigh, NC
Mathematics
- 2007–2011 **B.A. (2011)**, *Duke University*, Durham, NC
Philosophy and Mathematics

RESEARCH INTERESTS

My primary domain of study is low-dimensional topology, drawing from the fields of

- symplectic topology,
- knot theory,
- differential topology,
- gauge theory.

Of particular interest are the applications of Floer homology theory and the Atiyah-Floer conjecture.

PAPERS

David G. White. “Symplectic Instanton Knot Homology”. in progress. 2022

TALKS

- Mar. 2022 **Symplectic Instanton Knot Homology**, *Indiana University*, Bloomington, IN
Informal presentation and discussion, by invitation.
- Feb. 2022 **Symplectic Instanton Knot Homology**, *Indiana University*, Bloomington, IN
Informal presentation and discussion, by invitation.

TEACHING

All courses below were held at North Carolina State University (NC SU).

Primary instructor

Course	Terms
Calculus III - Multivariable calculus	Fall 2019
Topics in Contemporary Mathematics	Summer 2, 2021 & 2019

Recitation leader (teaching assistant)

Course	Terms
Survey of Geometry	Fall 2021
Calculus III - Multivariable calculus	Spring 2021 & 2019
Calculus I - Single-variable calculus	Spring 2020, Fall 2018

SERVICE

2021 vim-latex workshop.

EMPLOYMENT

2017 **Tutor**, *Mathnasium*, Huntersville, NC
Mathematics tutor for K-12 students.

2015–2016 **Associate Software Developer**, *iPipeline, Inc.*, Exton, PA
Front- and backend developer of engine producing prospectus for insurance and other actuarial products.

2011–2013 **Senior Developer**, *BPM Specialists, Inc.*, Atlanta, GA
Pega-certified Senior Developer & Systems Architect. Worked on Java-based business process management (BPM) applications for clients including Wells Fargo and TSYS.

SKILLS

Computing

Mathematical	SymPy, Maple, MATLAB, Mathematica	High-level	C/C++, Java, VisualBasic (.NET)
Scripting	Python, PHP, Javascript, Vimscrip, bash, zsh	Document / Markup	T _E X, HTML, CSS, Markdown
System	Linux, MacOS	Version control	Git

Languages

French	Intermediate	<i>Proficient reader, intermediate to advanced listening comprehension, developing speaker. Some university coursework.</i>
German	Beginner	<i>Some university coursework.</i>