Department of Mathematics
North Carolina State University
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David White

Curriculum Vitae

dave-white.github.io | dave-white (GitHub)

Education

2017– expected spring 2023 — **Ph.D.**, *North Carolina State University*, Raleigh, NC
Mathematics

2007–2011 — **B.A.**, *Duke University*, Durham, NC
Philosophy and Mathematics

Research interests

My study is conducted in the field of low-dimensional manifold topology, with a focus upon applications of Floer theory to questions of 3-manifold topology and of knot theory. Of particular interest for me here are the implications of the ideas underlying the Atiyah-Floer conjecture—the linkage between the gauge-theoretic properties of a space and those based in symplectic geometry.

Publications

expected 2022 — David G. White. "Symplectic Instanton Knot Homology". In: (2022)

Skills

Computing

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

Languages

French — Intermediate — *Proficient reader, intermediate to advanced listening comprehension, developing speaker. Some university coursework.*

German — Beginner — *Some university coursework.*

Employment

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

2014–2016 **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 Systems Architect.

TEACHING

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

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