

CURRICULUM VITAE

Brian Heinold
Department of Mathematics and Computer Science
Mount St. Mary's University
Emmitsburg, MD 21727
(301)-447-5820 (ext. 4823)
heinold@msmary.edu
<http://faculty.msmary.edu/heinold/>

EDUCATION

- Ph.D. Mathematics, Lehigh University, May 2006. Thesis topic: Sum list coloring and choosability. Advisor: Garth Isaak.
- M.S. Mathematics, Lehigh University, May 2003.
- B.S. Physics, Montclair State University, May 2001, *magna cum laude*. Additional majors in mathematics and classics.

TEACHING EXPERIENCE

- **Positions held**
 - Assistant Professor, Department of Mathematics and Computer Science, Mount St. Mary's University, 2006-present.
 - Teaching Assistant, Department of Mathematics, Lehigh University, 2001-2006.
 - Adjunct Professor, Department of Mathematical Sciences, Montclair State University. Co-taught college physics, Summer 2001.
- **Courses Taught**
 - Courses taught at Mount St. Mary's University — Precalculus, Calculus I,II.
 - Courses taught at Lehigh — Basic Statistics, Survey of Linear Algebra, Survey of Calculus II, Calculus I Part B.
 - Courses TA-ed at Lehigh — Basic Statistics, Calculus I,II,III, Calculus I Part B.

RESEARCH EXPERIENCE

- **Interests**
 - Graph Theory and Combinatorics, and in particular, graph coloring problems including list coloring and $L(2,1)$ -labeling. My dissertation was on *sum list coloring* - lists of colors are assigned to the vertices of a graph, and one seeks the minimum sum of the list sizes such that no matter what lists of those sizes used, one can always find a choice of colors from those lists where adjacent vertices get different colors.

- **Publications**

- A survey of sum list coloring, *Graph Theory Notes of New York*, **LII** (2007).
- Sum choice numbers of some graphs. Submitted.

- **Presentations**

- *Sum list coloring*. AMS Special Session on Graph Theory and Combinatorics, Hoboken, NJ, 2007.
- *Sum list coloring*. Graph Theory Day 51, Montclair State University, 2006.
- *Choosability of complete bipartite and related graphs*. Lehigh Graph Theory and Combinatorics Seminar, 2005.
- Five presentations at Lehigh Mathematics Graduate Student Colloquium, 2004-2006. Topics included transcendental and surreal numbers, graph theory and fractal images.
- Four presentations at Sigma Xi Student Research Conference, Montclair State University, 1999-2001. Topics included fractal images, computer simulation of a magnetic pendulum, and audio-visual experiments with waves and modulation.

SERVICE

- Library Committee, Mount St. Mary's University, 2006.
- Grader for Lehigh University High School Math Contest 2003-2006.
- Numerous activities in Lehigh University Mathematics Department, including helping at the Mathematics department L^AT_EX seminar and the new graduate student orientation.

HONORS AND AWARDS

- Teaching Assistantship. Department of Mathematics, Lehigh University, 2001-2006.
- Outstanding Baccalaureate Award - Physics. Montclair State University, 2001.
- Kibbe Scholarship. Department of Classics and General Humanities, Montclair State University, 1999-2000.
- 'Meritorious' designation in 1999 COMAP Mathematical Contest in Modeling.

MEMBERSHIPS

- AMS, MAA.
- Project NExT Section Fellow, MD-DC-VA section, 2006-2008.