

RESEARCH EXPERIENCE FOR UNDERGRADUATES IN MATHEMATICS

NATIONAL SCIENCE FOUNDATION FELLOWSHIP OPPORTUNITY

Fellowship recipients will become active collaborators with faculty members at Grand Valley State University, conducting original research in mathematics while developing their mathematical communication skills. Past student projects have resulted in publications in professional journals and award-winning presentations at state and national conferences.

PROGRAM INFORMATION

DATES: Sunday, June 14 to Sunday, August 9, 2015

ELIGIBILITY: Must be a citizen or permanent resident of the U.S. or its possessions, current full-time or part-time undergraduate, and have completed one full year of calculus and one course in linear algebra.

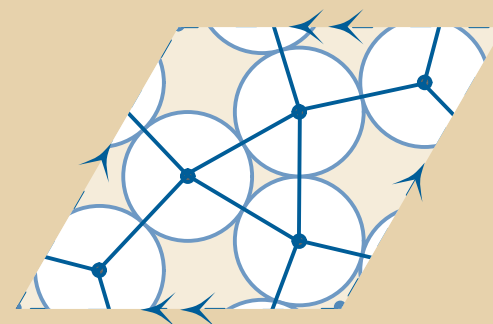
SETTING: Beautiful summertime in West Michigan!

SUPPORT: \$4,000 research stipend, on-campus air-conditioned housing with your own bedroom, and a generous food allowance.

APPLICATION DEADLINE: Applications received by Friday, February 20, 2015 will receive full consideration. Review of applications will continue until all positions are filled. Applicants will be notified of their acceptance by the end of March.

We particularly welcome applications from students belonging to groups traditionally underrepresented in mathematics.

SUMMER RESEARCH TOPICS

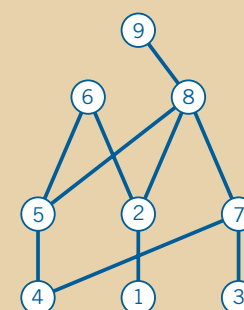
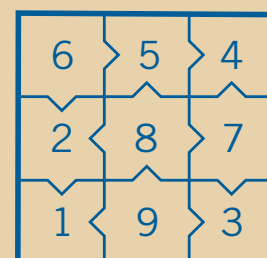
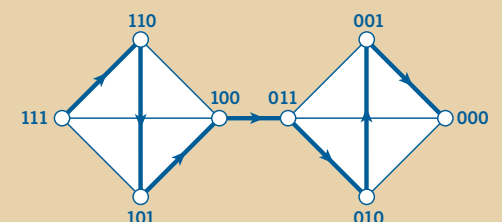


EQUAL CIRCLE PACKING

Find and prove the optimality of dense arrangements of circles on tori or Klein bottles.

VOTING THEORY

Investigate graph-theoretic models of voter preferences in referendum elections.

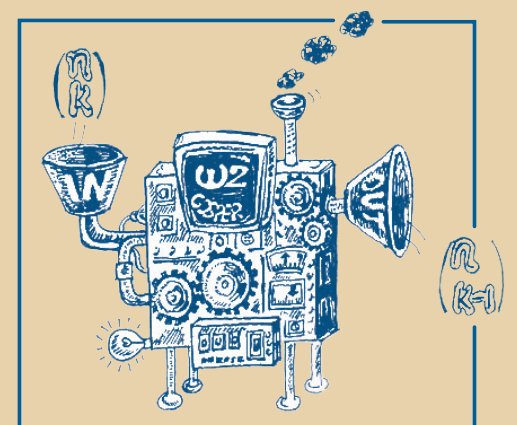


ANALYSIS OF SUDOKU

Explore variations of Sudoku puzzles using techniques from discrete mathematics.

COMBINATORIAL SUMS AND IDENTITIES

Explore various proof techniques and problems related to combinatorial sums.



FOR MORE INFORMATION

APPLY: Online at www.gvsu.edu/mathreu

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GRAND VALLEY
STATE UNIVERSITY
DEPARTMENT OF MATHEMATICS