REU in Nonlinear Traveling Waves and Pattern Formation

June 5th through July 28th 2017

Fairfax, Virginia

Location

The program is hosted at George Mason University in Fairfax, Va – a suburb of Washington D.C.

The Program

An NSF sponsored eight week research program for undergraduates. Two students will collaborate with Professor Matt Holzer on a research project related to traveling waves and pattern formation. The goal of the research is to derive mathematical predictions and explanations for the spontaneous emergence of coherent structures. Previous project topics have included invasion fronts on networks (2016), pattern formation in the dynamics of opinions and consensus formation (2015) and bacterial aggregation via traveling fronts (2012).

Ideal Candidates

Motivated undergraduate students who want to gain research experience. Applicants should have taken a course in differential equations. Advanced course work and experience with Matlab or similar computing language is a plus, but not required. Students must be US citizens or permanent residents.

Stipend and Housing

Students will receive housing in a George Mason dormitory, a meal plan and a $4000 stipend for the eight week program. Transportation costs up to $500 will be reimbursed.

Application

Please email a copy of your (unofficial) transcript and a short letter of interest to **mholzer@gmu.edu.** Arrange for one letter of recommendation from a faculty member to be sent to the same address. Deadline is March 10, 2017.

Please contact Professor Matt Holzer at **mholzer@gmu.edu** with questions.