REU 2020: Patterns & Differential Equations

June 15–July 24, 2020
Leiden, The Netherlands

Description

This NSF-funded REU project will explore connections between differential equations and pattern formation, using the theory of dynamical systems and partial differential equations, in addition to numerical techniques. Applications include vegetation pattern formation and other areas of mathematical biology and ecology.

Details

Location: Mathematical Institute, Leiden University, Leiden, The Netherlands
Dates: June 15–July 24, 2020
Faculty mentors:
Paul Carter, University of Minnesota
Arjen Doelman, Leiden University

Support includes:

• $3600 stipend
• Round trip travel from the United States (reimbursed up to $2400)
• Accommodation

How to apply

Application materials, including personal statement, unofficial transcript, and references to be submitted online at MathPrograms.org.
Application deadline: February 14, 2020

Application requirements:

• Must be a US citizen/permanent resident
• Must not complete undergraduate degree before summer 2020
• Should have taken a course in differential equations and/or dynamical systems
• Experience with (or interest in) Matlab

About the location

Leiden University is the oldest university in the Netherlands, located in the city of Leiden in South Holland, about 40 minutes from Amsterdam. This central location also provides easy train access to other major European cities such as Brussels (2 hours) and Paris (3 hours), and inexpensive flights to just about anywhere in Europe.