
Summer Math Research Opportunity

Event: The UH Pi Mu Epsilon chapter is hosting a talk by Dr. Steve Cox (Rice University) and Dr. Tamas Forgacs (CSU Fresno) to discuss a paid summer research opportunity to be held Summer 2013. If you're a math student who would like to get experience doing research, and get paid to do so while also having the opportunity to travel, come to the informational meeting!

Time and Place: Thursday, Jan 31 from 1-2PM in Room 646 PGH

Mathematics REU

California State University, Fresno

June 3- July 26, 2013

Apply Now!

Students will get:

\$3500 salary

\$500 travel allowance to the REU

\$500 travel allowance to a conference

Free housing during the REU

Awesome experience!

Contact:

Dr. Oscar Vega

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The Department of Mathematics at California State University, Fresno announces its Research Experience for Undergraduates during the summer of 2013. Students will conduct research in the following areas:

ZEROS OF ANALYTIC FUNCTIONS

Students in this group will learn about various techniques used in determining the location of zeros of a special class of analytic functions. Recently there have been two new approaches proposed in this area of research, and both of these approaches have the potential to answer deep questions concerning reality-preserving operators. We will investigate these new approaches as they apply to the so-called Legendre multiplier sequences, and multiplier sequences for arbitrary simple sets of polynomials. Students will be encouraged to use Mathematica® or other similar programs to carry out calculations, and develop conjectures. An ideal member of this research group should have completed a proof class. Being enrolled or having completed a real or complex analysis course would be a plus.

ALGEBRAIC KNOT THEORY

The mathematical theory of knots studies a collection of circles tangled in 3-space. One of its main problems is finding methods to distinguish these structures from each other.

Knot theory has provided models and applications to molecular biology, physics and quantum computing, and incorporates several areas of mathematics including topology, geometry, combinatorics and abstract algebra.

Students in this group will explore various invariants for links and their connections to combinatorics and algebraic structures. Hence, those interested in this topic should have had a course on linear algebra, be able to read and write proofs, and hopefully have some familiarity with abstract algebra.

For more information about the program and to complete the online application process please go to:

www.fresnostate.edu/csm/math/degrees/reu

Application deadline: March 1, 2013

Underrepresented students in the mathematical sciences are especially encouraged to apply.