

math news

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Seminar This Thursday

FSU mathematics alumnus Dr. Brendon LaBuz ('03), now of St. Francis University, will return to campus Thursday, February 4th to present a topology seminar "The Hawaiian Earring and Big Free Groups". All are encouraged to attend the talk, which will begin at 5:00 pm in CCIT 156.

Previous Puzzle and Solution

What is the largest even integer that cannot be written as the sum of two odd composite positive integers?

Take an even positive integer x . x is either $0 \pmod 6$, $2 \pmod 6$, or $4 \pmod 6$. Notice that the numbers $9, 15, 21, \dots, 9 + 6n, \dots$ (for nonnegative n) are odd composites. Now we have three cases. 1) If $x \geq 18$ and is $0 \pmod 6$, then x can be expressed as $9 + (9 + 6n)$, with both 9 and $9 + 6n$ being odd composites. 2) If $x \geq 44$ and is $2 \pmod 6$, then x can be expressed as $35 + (9 + 6n)$, with both 35 and $9 + 6n$ being odd composites. 3) If $x \geq 34$ and is $4 \pmod 6$, then x can be expressed as $25 + (9 + 6n)$, with both 25 and $9 + 6n$ being odd composites. Clearly, if $x \geq 44$, it can be expressed as a sum of two odd composites. However if $x = 42$, it can also be expressed using case 1. Further, if $x = 40$, case 3 applies.

The number 38 is our solution, since examination of its addend pairs shows no way to express it as the sum of two odd composite positive integers.

Here's an Easier One

Orvin went to the store with just enough money to buy 30 balloons. When he arrived, he discovered that the store was having a sale on balloons: buy 1 balloon at the regular price and get the second at $1/3$ off the regular price. What is the greatest number of balloons Orvin could buy?

Where Are You in Pi?

Find out where numbers important to you first appear in the decimal expansion of π by visiting the website <http://www.facade.com/legacy/amiinpi/>.

KME Corner

The first meeting of KME for the semester will be at 6:00 pm on Thursday, February 25th in CCIT 245. The annual induction ceremony is scheduled for the afternoon of Sunday, February 28th and will feature a presentation by Dr. Mark Hughes. Applications for membership in the mathematics honor society are due by Friday, February 12th.

Scholarship Money Available

- Apply For Yours Now! -

The following FSU scholarships are available to students who are mathematics majors or minors. Last year, students who applied and were eligible received awards ranging from \$450 to \$1500.

Excellence in Math Scholarship (SENIOR and FRESHMAN)

CBIZ Math Scholarship

Dr. & Mrs. Somashekhar V. Bellary Scholarship

Hedrick Teacher Excellence Award for Math/Science

American Legion Patriotic Scholarship Award

Brandon M. Carroll Memorial Scholarship

Marlene Weimer Memorial Scholarship

Dr. Joan DeVee and Dr. Alvin C. Broyles Presidential Merit Scholarship

Morris H. Willey and Tara Willey Memorial Scholarship

Eric Williams Presidential Merit Scholarship in Mathematics

Students eligible for any scholarship award should go to <https://frostburg.academicworks.com/>, use the same username and password you use in PAWS, and complete the online application process. The deadline is March 1st.

Ask a Busy Person ... Jocelyn Williams

Frostburg native Jocelyn Williams is double majoring at FSU in mathematics and the collaborative mechanical engineering program with the University of Maryland, College Park. That sounds like she might be busy, right? But wait, there's more.

Jocelyn applied for a very prestigious scholarship from the II-VI Foundation (an entity external to FSU) and received \$9000. Attached to that award was a nine-week internship with a major defense technology contractor, which could lead to employment at the company in the near future. Her internship work helped her discover a new interest, designing test fixtures for a variety of antennas, including some that could operate in outer space. Also a recent inductee into FSU's President's Leadership Circle, she is scheduled to travel with that group to Uganda this Spring to promote clean water. Oh yeah, she also works at Chick-fil-A.

More Alumni News

Justin Good (FSU Mathematics '12, and another Frostburg native) has recently accepted employment by the Academic Success Center at Potomac State College of West Virginia University. He tutors students in mathematics from the developmental level through Calculus, as well as physics. He also runs the mathematics lab for the Catamount Success Academy at the college.