SPECIAL SEMINAR AND OPEN HOUSE ON TUESDAY

Calling all Math lovers: first meeting next Tuesday, Sept. 18
All students invited, from first-year students to seniors

Are you interested in mathematics? Whether you are
➢ a first year student who enjoyed math in high school,
➢ a senior math major working on her thesis,
➢ or somewhere in-between these extremes,
you are invited to the opening mathematics meeting for students and faculty, to be held on Tuesday, September 18 on the second floor of Bailey Hall.

Professor Davide Cervone will speak about the mathematics behind Union’s unique collection of Olivier models. These are the 19th century’s version of computers, and there is a very special reason for launching the seminar. After many years, we finally have a home in Bailey for some of these beautiful brass and wood treasures, in the form of the glass display case that now sits outside the Mathematics Department office. See more about Professor Cervone’s talk on page 2.

Part 2 (Mathematics Common Room + Bailey 207, 5:15 - 6:00 PM): Pizza Dinner – free!

Part 3 (Mathematics Common Room, as dinner winds down): Meet the Mathematics Department.
Get to meet the professors who teach your courses, and learn something about the program we have in mind for the current year. Highlights include
➢ Each faculty member will say something about their research interests, and their favorite courses to teach.
➢ Some of our current senior students will discuss their thesis topics – the research they’ll be doing during 2007-2008.
➢ The 2007 Modeling Contest – what is it?
➢ The Hudson River Undergraduate Mathematics Conference – why will some of us have an opportunity to get to know each other v-e-r-y well this spring? When will Union next host this big event . . . hundreds of math majors from almost 100 colleges?
➢ News about the undergraduate math seminar for this fall.

All are welcome to attend! Sign up in your math class on Monday, or with Ms. Jorgensen in Math Dept HQ – Bailey Hall 202.
Undergraduate Math Seminar

The first meeting of the seminar will be this coming Tuesday, September 18, in Bailey 201 beginning at 4:15pm.

In this week’s seminar, Professor Davide Cervone will present the following talk:

**TITLE:** The Elegance of Line: Ruled Surfaces and the Dynamics of the Olivier Models

**ABSTRACT:** Union College owns a rare collection of early 19th century mathematical models designed by Théodore Olivier. At long last, nine of the more than 40 models are now housed in a display case in Bailey Hall, outside the Mathematics Department office. One of the remarkable qualities of these models is that they are manipulatives; that is, they have parts that move to help illustrate families of surfaces and how they interact. Due to the age and delicacy of the models, we no longer are allowed to adjust them, but we can still appreciate their elegant design. In this talk, we will discuss the differential geometry that underlies and motivates the Olivier models, and use interactive computer simulations to demonstrate their transformations, bringing these wonderful objects once again to life.

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The new display cabinet with the Olivier models on the second floor of Bailey Hall

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Resources for Students

- **FREE Calculus Tutoring!** The Calculus Help Center, housed in the Sorum House Seminar Room, is open from 7:30-10:00pm on Sunday through Thursday nights. The CHC supports all calculus courses from Math 100 through Math 115. This term’s tutors (below) are eager to help!
  
  o Michael Bono
  o Kate Colantuono
  o Ronghua Dai
  o Michael Doctor
  o Laura Hutchinson
  o Nikhil Patel

- **Lost your Newsletter?** The Math Department Newsletter is available online. See us at [http://www.math.union.edu](http://www.math.union.edu) under “Department Activities”.

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Problem of the Newsletter: September 14, 2007

This week’s problem: As we enter the new 2007-2008 academic year, determine the number of digits in $2007!2008!$.  

Professor Friedman will accept solutions to this problem until 12:00 noon Thursday, September 20. Email your solution to him ([friedmap@union.edu](mailto:friedmap@union.edu)) or put it in his mailbox in the Math Department’s office on the second floor of Bailey Hall.