10th Annual MATH Film Festival

in celebration of Math Awareness Month

Sponsored by the UM Math Club (visit http://www.math.umt.edu/mathclub for an online version of the film schedule)

Free Admission!

Tuesday, April 14, 2009
UC Theater

The topic of this year's Math Awareness Month is *Mathematics and Climate*– see http://www.mathaware.org/.

Film Schedule

→ ***The film descriptions are on the next page.*** ←

Afternoon

3:15 pm (1½ min) Attack of the Note Sheep (by Jess Scott)
(54 min) **Fractals: Hunting the Hidden Dimension (NOVA)**

4:15 pm (3 min) *The Math Geek
(16 min) **Robert Lang: Idea + Square = Origami (TED Talk)**

4:40 pm (2 min) *When Harry Met Math
(35 min) **Flatland: a Journey of Many Dimensions**

Evening

7:00 pm (2 min) *When Harry Met Math
(27 min) **Donald in Mathmagic Land**

7:35 pm (10 min) ***The Vampire Curse of the Math Zombies**

7:50 pm (52 min) **Achieving the Unachievable (A documentary on M. C. Escher)**

8:45 pm (16 min) ***Dakota Woods and the Theorem of Gloom**

**** Films produced by UM Math Major Laura Williams***

And during intermissions, music courtesy of *Calculus: The Musical!*
(http://calculusthemusical.com/)

A big **THANK YOU** from The University of Montana Math Club to the copyright holders for permitting us to screen these films free of charge: Laura Williams; the WGBH Educational Foundation and The Catticus Corporation; TED Conferences, LLC; Seth Caplan and Flat World Productions, LLC; The Walt Disney Company; and Locomotion Films (who even provided the DVD).

For more information, *contact Math Club President Christina Anderson (493-1993) or Math Club Advisor Nikolaus Vonessen (UM Math Department, 243-6222). Laura Williams can be reached at laura.williams@umontana.edu.*

Math Film Festival April 14, 2009 UC Theater, University of Montana

Attack of the Note Sheep (by Jess Scott, 2003, 1½ min.) **3:15pm**
What's not to like when doodle sheep attack a student's notes during a booooring abstract algebra class?

Fractals: Hunting the Hidden Dimension (NOVA, 2008, 54 min.) **3:15 pm**
What do movie special effects, the stock market, heart attacks, and the rings of Saturn have in common? They all consist of fractals, irregular repeating shapes that are found in cloud formations and tree limbs, in stalks of broccoli and craggy mountain ranges, and even in the rhythm of the human heart. NOVA takes viewers on a fascinating quest with a group of pioneering mathematicians determined to decipher the rules that govern fractal geometry. Their remarkable findings are deepening our understanding of nature and stimulating a new wave of scientific, medical and artistic innovation stretching from the ecology of the rainforest to fashion design. (Quoted from the website of WGBH, the public television station that produces NOVA, see http://shop.wgbh.org/product/show/48027).

The Math Geek (by Laura Williams, 2008, 3 min.) **4:15pm**
Short and funny, starring math major Nick Paterno as The Math Geek. It's a blast!

Robert Lang: Idea + Square = Origami (TED Talk, 2008, 16 min.) **4:15 pm**
"Lots of scientists have favorite hobbies, but it's rare that those hobbies blossom into an exciting new branch of research. But that's just what happened to Robert Lang, a former NASA researcher whose 40-year fascination with the Japanese art of origami led to his pioneering an intriguing cross-disciplinary interweaving of origami with mathematics. He's now recognized as one of the world's leading masters of the art, as well as a leading consultant on various practical applications of origami to common engineering problems: using the underlying algorithms to simulate air bag deployment, for example, or to design a stent graft." Be prepared to be amazed! (Quoted from the blog of Jennifer Ouellette at http://blogs.discovery.com/twisted_physics/2009/02/lessons-from-an-ancient-art.html.)

When Harry Met Math (by Laura Williams, 2008, 2 min.) **4:40 and 7:00 pm**
What's the perfect present for the math geek in *your* life? Find out in this mini-musical, which is slightly on the silly side. *Viewer Discretion Advised:* Be prepared for green flashes, some pixelation, and other minor shortcomings in Laura William's great student-made films.

Flatland – A Journey of Many Dimensions (2007, 35 min.) **4:40 pm**
According to famed author Rudy Rucker, the best Flatland movie yet! Even if you have never read the 1884 novel "Flatland" by Edwin A. Abbott (you can find it free on the web), you'll love this animated film adaptation. More information at http://www.flatlandthemovie.com/.

Donald in Mathmagic Land (Disney, 1959, 27 min.) **7:00 pm**
Back by popular demand! This is a favorite of kids and adults. Donald Duck participates in a remarkable adventure in Mathmagic Land, where the ancient Greeks tell him about some of their basic mathematical principles. Donald discovers that mathematics enters almost every phase of daily life – music, art, architecture, mechanics and games.

The Vampire Curse of the Math Zombies (by Laura Williams, 2008, 10 min.) **7:35 pm**
The kids can stay – they won't be frightened by these zombies! Professor Prime (Jade Roskam) is the mysterious substitute for Professor George McRae, who disappeared under strange circumstances (but don't worry, he is sitting somewhere in the audience near you). And soon the math zombies are on the prowl. One of the best parts of this film are the long credits with some hilarious scenes. Don't leave before you find out why Anita (played by Stephanie Bell) dreams of having three girls, one boy, four twins, and – you guessed it – one nanny. Or three boys, one girl, whatever.

Achieving the Unachievable (A documentary on a print by M.C.Escher, 2007, 52 min.) **7:50 pm**
This documentary explores one of the most fascinating enigmas of modern art – the empty circle at the centre of *Print Gallery* by Dutch artist M. C. Escher. In 1956, Escher challenged the laws of perspective with *Print Gallery* and found himself trapped behind an impossible barrier... This uncompleted masterpiece quickly became the most puzzling enigma of Modern Art, for both artists and scientists. Half a century later, mathematician Hendrik Lenstra took everyone by surprise by drawing a fantastic bridge between the intuition of the artist and his own, shattering the Infinity Barrier! (From the film synopsis, available at http://www.locomotionfilms.com/documentaires.php#.)

Dakota Woods and the Theorem of Gloom (by Laura Williams, 2009, 16 min.) **8:45 pm**
Sinister Professor Inertia (John Ashley) sends Dakota Wood (Clark Kogan) and his sidekick Millie Raycott (Lindsey Ramsey) on a quest to find the Theorem of Gloom, which had been discovered in ancient times by Pythagoras. After having been lost for millennia, it is now rumored to be have been brought to Missoula by Evil Hippies. Major applications to Male Pattern Baldness. This statement has not been evaluated by the FDA.

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