

8th Annual MATH Film Festival

in celebration of Math Awareness Month

Sponsored by the UM Math Club (www.math.umt.edu/mathclub)

Tuesday, April 17th, 2007 UC Theater

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

3:10 pm	The Early History of Mathematics
3:45 pm	Myths About the Developing World
4:10 pm	The Great Pi/e Debate
4:55 pm	Donald in Mathmagic Land
7:00 pm	Breaking Vegas

The Early History of Mathematics (Project Mathematics, 2000, 29 min.)

This video, produced by Caltech Math Professor Tom Apostol, traces some of the landmark developments in the early history of mathematics, from Babylonian calendars on clay tablets produced 5000 years ago, to the introduction of calculus in the seventeenth century. The program also includes some mathematical derivations in animated form: proofs of the Pythagorean Theorem, a new geometric proof of the irrationality of the square root of 2, two methods for calculating the area of a circular disk, and the Archimedes method for estimating π . (Based on quotes from http://www.projectmathematics.com.)

Myths About the Developing World (TEDTalks, 2006, 21 min.)

3:45 pm

In his presentation, Hans Rosling, a professor at Sweden's world-renowned Karolinska Institute, makes important statistics data come alive in the most spectacular way. To quote Jon Graham, one of our statistics professors: "The way the data are presented is revolutionary in my mind. The software being used to depict relationships between multiple variables in different countries/regions over time is incredible. It is not often that we get to see such a powerful use of dynamic (as opposed to static) graphics to illustrate a temporal trend." After watching this video you might want to play with these statistics yourself at http://tools.google.com/gapminder.

The Great Pi/e Debate (MAA, 2007, 40 min.)

4:10 pm

Hilariously funny ... Colin Adams and Thomas Garrity settle once and for all the burning question that has plagued humankind from time immemorial: "Which is the better number, e or π ?" In what could be the most important debate of the millennium, Williams College Professors Adams and Garrity use any means within their powers, legal or otherwise, to prove their point. Moderated by Edward Burger, our debaters challenge orthodoxy, brazenly flaunt convention and behave rather badly in their attempts to convince the audience of the absolutely ridiculous nature of their adversary's arguments. This event may have the historical significance of the Edict of Nantes, the Yalta conference, or the Kennedy-Nixon debates. Or perhaps not. But just in case, you don't want to miss it. (Quoted from http://www.maa.org.)

Donald in Mathmagic Land (Disney, 1959, 27 min.)

4:55 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.

Breaking Vegas (The History Channel, 2004, 90 min.)

7:00 pm

Five days a week, they were nondescript MIT students: engineers, mathematicians and computer scientists. But on weekends, they would gather tens of thousands of dollars and jet off to Vegas and other gambling hot spots, where they would defy the odds with a sophisticated card counting scheme that won them millions at blackjack.

Breaking Vegas goes inside the riveting story and shows us how the MIT group was founded and stayed in action for decades, eventually evolving into a full-fledged business – one with only one product, money, which it made by legally beating the casinos at their own game. Interviews with casino heads and former members of the team shed light on the opposite sides of this strange cat-and-mouse game, and we'll see how their remarkable run finally came to an end. (Quoted from http://store.aetv.com.)

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