



How Mathematics is Making Hollywood Movies Better

Presented by

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What's your favorite recent movie? *Frozen*? *The Avengers*? *Avatar*? *Transformers*? What do these and all the highest earning Hollywood movies since 2000 have in common? Mathematics! You probably didn't think about it while watching these movies, but math was used to help make them. In this presentation, we will discuss how math is being used to create better and more realistic movies. Along the way we will discuss some specific movies and the mathematics behind them. We will include examples from Disney's 2013 movie *Frozen* (how to use math to create realistic looking snow) to Pixar's 2004 movie *The Incredibles* (how to use math to make an animated character move faster). Come and join us and get a better appreciation of mathematics and movies.

Friday
September 25, 2015

4:00-5:00 p.m.
115 Avery Hall

University of Nebraska-Lincoln

Reception: 348 Avery Hall
3:30-4:00 p.m.

Sponsored by the Department of Mathematics,
the Nebraska Alpha Chapter of Pi Mu Epsilon
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Michael Dorff

Michael Dorff is a professor of mathematics at Brigham Young University in Utah. He received his PhD in complex analysis from the University of Kentucky in 1997. He is the founder and director of the \$2.6 million NSF-funded Center for Undergraduate Research in Mathematics (CURM).

He has received several university and national teaching awards including a Mathematical Association of America's Haimo Teaching Award, the top U.S. award for teaching undergraduate mathematics, and BYU's top teaching award, the Maeser Excellence in Teaching Award, both in 2010. In 2012, he was honored with BYU's Egbert Teaching and Learning Fellowship and was named a Fellow of the American Mathematical Society.