

# Physics Colloquium

Michigan Technological University

Thursday February 19, 2015

4:00PM Fisher Hall 139

**Hail to the Data: What we're learning from Learning Analytics**

**Professor Timothy McKay**

University of Michigan

Director of Honors Program

Arthur F. Thurnau Professor of Physics

## Abstract:

Current education practices generate an enormous array of mostly unexamined data: from traditional student record data like grades and degrees to digital forms of student work. Wise, timely, and precise use of these data will make personalized education at scale possible. All of the skills of data science will be needed, and our success in meeting this challenge will play an important role in defining the future of higher education. In this talk I will describe the results of three years of learning analytics activity at the University of Michigan, focusing on some interesting discoveries related to STEM education and some proposals for rethinking the GP.

## Bio:



Professor McKay is a data scientist, with extensive and various experience drawing inference from large data sets. In astrophysics, his main research tools have been the Sloan Digital Sky Survey, the Dark Energy Survey, and the simulations which support them both. In education, he works to understand and improve postsecondary student outcomes using the rich, extensive, and complex digital data produced in the course of educating students today. He has also been an academic administrator, leading the 1800 student Honors Program in the UM College of Literature Science and the Arts since 2008.

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