

## **COLLOQUIUM SPEAKER SERIES**

Mathematics & Computer Sciences Friday, December 03, 2010 12:00-12:50 in D674



## Dr. Tim Trudgian

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**Research interests:** Analytic number theory Riemann zeta-function.

## Some Mathematics in Music

This talk will explain some of the (elementary) mathematics behind musical harmonics:

why one combination of notes produces a pleasant sound, while another is abominable;

why, in Western music, there are twelve notes in a scale; and the reasons that instruments can be tuned very accurately "by ear" alone.

Mathematics at a level beyond secondary school will not be assumed, nor will any music theory.

There will be refreshments and snacks. **Open to all!**