

# Department of Mathematics and Statistics COLLOQUIUM

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## Ordinary Math in the Everyday World

How does a mathematician survive and thrive outside of academia? This talk is the speaker's attempt to provide an answer to this question. Its examples are drawn from milestones in the speaker's career, where mathematics and mathematical thinking were critical in solving real world problems. These include (a) the discovery of the flaws in WEP, the original Wi-Fi encryption scheme, (b) the ideas that led to the creation of RDRAND, Intel's random number instruction, (c) rationalizing design of the anonymous authentication protocols used by trusted computing, and (d) the design of Skein, one of the SHA3 finalist algorithms.

**TUESDAY, OCTOBER 20th**

**SCIENCE CENTER 183**

**Refreshments 4:15**

**Talk 4:30**