

# BI-CO MATHEMATICS COLLOQUIUM

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## "What Math Can Tell Us About eBay, Teacup Auctions, and the Winner's Curse"

Monday, February 1, 2016

Talk at 4:00 – H109

Tea at 3:30 – KINSC Math Lounge, H208

### **Abstract:**

From Sotheby's to eBay to the advertisements you see on Google, auctions are everywhere. As auctions can cost and earn individuals and companies lot of money, economists have developed a mathematical theory of auctions that addresses two main questions:

1. Given an auction, what is the best strategy for bidders to bid?
2. Given an auction and a bidding strategy for all bidders, how much revenue can a seller expect to earn from the auction?

In this talk, we discuss these two questions in several different settings in an attempt to give a brief introduction to the field. The other aim of the talk is to convince the audience that auction theory is a fun, applicable, accessible, and wide-open field for undergraduate research in mathematics.

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