

BI-CO MATHEMATICS COLLOQUIUM

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*“The Mathematics of Measuring
Self-Delusion”*

Monday, November 17, 2014

Talk at 4:00 – Park 338
Tea at 3:30 – Park 355, Math Lounge

Abstract:

Your brain is tricky. When you break up with your partner, you tell yourself that you never much liked him/her anyway. When you buy the more expensive house, you comfort yourself with an exaggerated memory of how inadequate the cheaper house was. It might seem self-delusional, but these are ways in which your brain rationalizes your past choices, even the irrational ones, perhaps in part to avoid regret.

Over the last 5 decades, dozens of “free-choice” social psychology experiments have attempted to measure how cognitive dissonance leads us to rationalize our choices. But a few years ago, Chen and Risen pointed out a logical flaw affecting the conclusions of all free-choice experiments. In this talk, I will describe the past experiments and the simple yet subtle mistake hidden in their conclusions. Can the mistake be fixed? To address this question, I will discuss new work (joint with Peter Selinger) that provides experimental methods of fixing the flaw, but also reveals other flaws, leading one to wonder whether any type of free-choice experiment could ever correctly measure choice rationalization caused by cognitive dissonance.

No mathematical background will be assumed. There will be a Dilbert cartoon and a bit about monkeys and M&Ms.

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