

Joint Math Colloquium

Millersville University and Franklin & Marshall College

**Speaker: Ms. Quyen Do, Senior Math Major
Department of Mathematics
Millersville University**

**Title: Realistic Applications of the Kelly Criterion to College Football Betting
- an REU project**

Date: September 21, 2017 (Thursday)

Time: 4:00 pm – 5:00 pm

Place: Room 201, Wickersham Hall, Millersville University

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Abstract:

The Kelly criterion is a mechanism used for properly sizing a portion of one's capital for betting and investing purposes. The first part of this presentation is to explore a realistic application of the Kelly criterion. The objective is to maximize a bettor's return while simultaneously minimizing the risk of ruin in the context of betting on FBS college football games. Our group's methodology consists of data scraping and cleaning, probability modeling for both moneyline and spread betting, and simulations for varying approaches - differing number of bets, game filtering methods, and fractional Kelly sizes are all considered. The presentation will conclude with some reflection and information on the REU experience at Lafayette College this summer.