

**When:** Friday, February 2, 2018 at 3 pm in PB 012

**Presenters:** Ariana Cavazos and Abigayle Dirdak (Fresno State Students)

**Title:** Knot or Not a Knot? - A Game on Knot Diagrams

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**When:** Friday, February 9, 2018 at 3 pm in PB 012

**Presenters:** Emma DenBesten, Maria Diaz, and Yuliana Segura (Fresno State Students)

**Title:** Exploding Dots

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**When:** Thursday, October 26, 2017 at 4 pm in PB 033

**Presenter:** Ariana Cavazos (Fresno State student)

**Title:** An Analysis of Obesity and Climate Change in the United States

**Abstract:** Obesity and climate change have become a major issue in the United States. To gain a better understanding on how obesity impacts the environment, we analyzed Edwards and Roberts' study (2009), "Population adiposity and climate change." They made very strict assumptions regarding the United Kingdom in the 1970s and in 2010. To better represent the United States, we made our own assumptions so we could grasp an understanding of how changes in BMI are affecting greenhouse gas emissions. Specifically, the study focuses on greenhouse gases emitted from food production, vehicle transportation, and air travel. We found that their assumptions were relatively consistent with our normal weight population. However, Edwards and Roberts' predicted 2010 population had greatly underrepresented estimates compared to our hypothetical overweight population, thus suggesting that a rise in BMI is indeed causing greater emissions to be emitted due to food production, vehicle emissions, and aviation fuel demands.

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**When:** Thursday, September 28, 2017 at 4 pm in PB 033

**Presenter:** Abigayle Dirdak (Fresno State student)

**Title:** Virtual Trivalent Braids

**Abstract:** This talk is based on my summer research experience during the 2017 Mathematics REU (Research Experience for Undergraduates) at Fresno State. Come learn some cool stuff about braids and their geometric and algebraic properties.