

Department of Mathematics & Statistics Summer Research Showcase

Functional Benefits of Dale's Law and Balanced Neuronal Network Dynamics

Asha Bhuiyan, Max Sundgren, Fangzhou Xing (15 min) Advisor: Victor Barranca

Domains of Convergence for Circle Packings

Nooria Ahmed, Emilie Rivkin, Jacob Viscusi (15 min) Advisor: Ian Whitehead

Imputation Bias in the Fingerprint Examination Process

Sherry Huang (5 min) Advisor: Amanda Luby

Clustering Techniques for Analyzing Fingerprint Minutiae Labeling

Thomas Dailak (5 min) Advisor: Amanda Luby

Neural Modeling of Barn Owl Sound Localization

Ben Drucker (5 min) Advisor: Josh Goldwyn

Knot Mosaics Using Rhombus Tiles

Adria Retter (5 min) Advisor: Tom Crawford

SET and Planet Caps

Ellis Buckminster, Kevin Stewart-Mercurio (10 min) Advisor: Lucas Van Meter

Exploring Projective SET

Amy Liu, David Yang, Tinashe Maparura (15 min) Advisor: Lucas Van Meter

Performance of Fingerprint Examiners in an Error Rate Study

Alyssa Zhang (5 min) Advisor: Amanda Luby

IRT Models with Covarying Difficulty Responses

Riley Thompson (5 min) Advisor: Amanda Luby

Applying Ordinal IRT Models to the FBI White Box Study

Horace Shew (5 min) Advisor: Amanda Luby

Fractal Dimensions of Polyhedral Circle Packings

William Ball, Dylan Torrance (15 min) Advisor: Ian Whitehead

Estimating the duration of a mass extinction

Dohyun Lee, Hellman Zhao, Satyaa Suresh (10 min) Advisor: Steve Wang

Thursday, July 22, 2021

10am-12pm

Zoom Link: <https://swarthmore.zoom.us/j/85154217843>