Mark Agrios

magrios@gmail.com | markagrios.net | (703).638.9648

Research Interests:

Computational and theoretical neuroscience. Applications of algebraic topology and differential geometry in studying neural manifolds and encoding of information. Emergence and criticality in self organizing systems.

Positions:

Research Technologist at the Miri Lab, Northwestern University [https://mirilab.org]

- August 2019 - present

Academic Training:

B.S. Neuroscience, College of William & Mary, Spring 2019
B.S. Mathematics, College of William & Mary, Spring 2019

Leadership Positions:

Pi Mu Epsilon Math honors society president at William & Mary

- Fall 2018 - Spring 2019

Grants Awarded:

NSF, William & Mary EXTREEMS-QED program, summer 2017
William & Mary honors fellow summer 2018

- Project: *Simplicial Homology and Burst-Synchronizing Neural Networks* (in progress) Advisors: Prof Sarah Day (department of mathematics) Prof Drew LaMar (department of biology)

Conferences Presented

Undergraduate research project

EXTREEMS-QED Summer research colloquium (talk)	July 2017
SUMS at James Madison University (talk)	October 2017
JMM in San Diego (talk)	January 2018

SIAM-SEAS at UNC (talk, invited) March 2018

EXTREEMS-QED Summer research colloquium (talk, invited) June 2018

SIAM at the University of Delaware (talk) September 2018

Work with the Miri Lab

Society for Neuroscience in Chicago (poster) October 2019

Conferences Attended

BAMM at VCU May 2017

Computational Experience [https://github.com/markagrios]

Python
Matlab
Electrophysiology and spike-sorting software

- SpikeGLX
- Kilosort/Kilosort2
- Phy