Joint Math Colloquium

Millersville University & Franklin & Marshall College

Speaker: **Dr. Peter Chi, Assistant Professor of Statistics**
Villanova University

Title: **New Tools for Evolutionary Biology, and Teaching Data Science**

Date & Time: **April 18, 2019 (Thursday), 4-5 PM**

Place: **Franklin & Marshall College, Stager Hall Room 219**

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Abstract: *In this talk, I will discuss three things: my recent work in Evolutionary Biology, tools for learning Data Science, and graduate program opportunities at Villanova University.*

In Evolutionary Biology, one of the major goals of the field is to determine whether natural selection is occurring. There are many existing tools for detecting natural selection, but all of the most widely used methods fail to account for the fact that proteins within organisms have a 3-dimensional structure. This structure is a major determinant of the protein's function, and thus is also tied to whether natural selection is occurring. I will present a new statistical method that I am developing in order to use this information.

Additionally, I have recently authored a course for the online Data Science learning platform called DataCamp, available at datacamp.com. I will introduce the course that I wrote, called "Probability Puzzles in R," and showcase the other valuable learning opportunities at datacamp.com.

Finally, I will briefly discuss graduate programs at Villanova University for those who are interested in pursuing Masters degrees in Statistics or related fields. Currently, we offer Masters degrees in Mathematics, Applied Statistics, and are in the process of developing a joint MS degree in Data Science, in collaboration with the Computer Science department.

All Are Welcome!