

# The World of Mathematics and Statistics

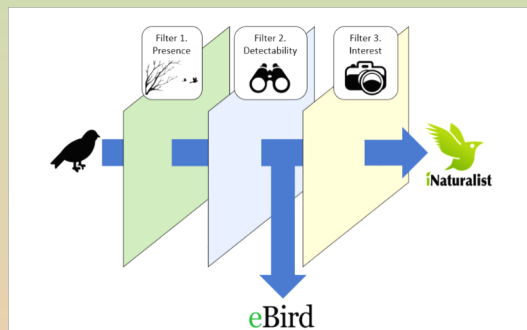
SWARTHMORE COLLEGE • DEPARTMENT OF MATHEMATICS AND STATISTICS

## Math/Stat Colloquium



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### **Birds, Butterflies, Community Scientists, Oh My! What Participatory Science Data Can Tell Us About Both Nature and Data Collectors.**

Many ecological questions require hard-won data, but thanks to participation from community members on a variety of nature apps, there is more and more data available for a variety of species, across longer time scales and broader spatial extents. However, this data is collected in a less rigorous fashion, so there are limitations for its use for statistical modeling. Comparing more systematically collected data to more opportunistically collected data can teach us not only about the ecology but also about the behavior of the data collectors themselves. This meta-knowledge can help when we want to use this data for statistical inference. In this talk I will discuss comparisons between these two types of data for both birds and butterflies to illustrate.

**Tuesday, September 26**

Science Center 199

Refreshments 4:15pm; Lecture: 4:30-5:30pm