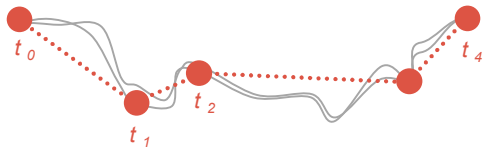
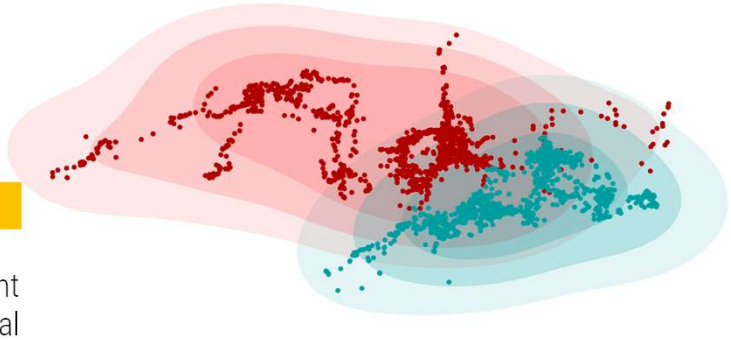
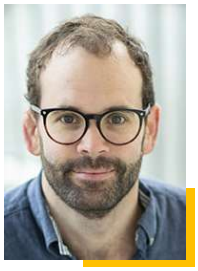
Introduction to continuous-time movement modeling for animal tracking data





The workshop will be presented by:

Christen H. Fleming, Assistant Professor, University of Central Florida, Department of Biology, Ecoinformatics Lab lead, ***ctmm*** lead developer. His research focuses on developing and applying analytic methods for ecological, environmental, and evolutionary data, with an emphasis on conservation. Dr. Fleming has an interdisciplinary background in mathematics, statistics, and physics



Michael J. Noonan, Assistant Professor, University of British Columbia, Department of Biology, Quantitative Ecology Lab lead, ***ctmm*** developer. His research program is aimed at disentangling complex and nuanced biological patterns from statistical bias, and at developing statistical methods and software for handling the unique challenges posed by ecological data.

Animal tracking datasets often come with substantial autocorrelation and location error that render classical analyses invalid and cause differential biases. Continuous-time stochastic-process methods offer a solution to these challenges.

This workshop will provide beginners with an introduction to important movement ecology concepts, as well as hands-on experience using the award-winning "continuous-time movement modeling" (***ctmm***) ***R*** package to apply advanced statistical methods to tracking data.

Participants will learn how to:

- Fit ***continuous-time movement models***,
- Interpret ***model parameters***,
- Perform ***home-range*** analysis,
- Estimate ***habitat suitability***,
- Perform ***path reconstruction***.

Dates

Monday-Friday July 21-25, 2025

8:30 am - ~4:30pm (some afternoons will be user data focused)

Location

Peavy Forestry Science Center. Rm 125
Oregon State University
Corvallis, Oregon

Registration for the Workshop:
https://oregonchapterofthewildlifesociety.wildapricot.org/event-6111379

Participants are expected to be comfortable in using ***R***.
Participants must provide their own laptop computer.

Please contact christen.fleming@ucf.edu for questions.

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