We are seeking a motivated MS student to join a large international project funded by the Human Frontiers Science Program (HFSP) aiming at understanding how seabirds navigate and the role of infrasound in their movement [1]. The MS thesis will follow one of two possible paths, requiring students with two distinct profiles: one in applied statistics/mathematics; and one in quantitative ecology. Applications are encouraged for both profiles, but only one student will be selected.

1) Applied statistics/mathematics profile: The student will focus on the development of movement models integrating environmental cues. Applicants should have a background in mathematics or statistics, including at least a course in mathematical statistics (and not just applied statistics) and strong programming skills; fluency in R and a genuine interest in ecological applications are highly desirable. Previous experience, e.g., internships in movement ecology-related subjects or previous work with tracking or satellite data, is a plus. Interactions with the trajectometry group PathTIS in France [2] should be expected.

2) Quantitative ecology profile: The student will work to quantify and understand the associations between individual movement and abiotic conditions (such as meteorological conditions or the infrasoundscape) at multiple scales. Applicants should have a background in ecology and several courses in applied statistics, and are expected to demonstrate basic programming skills; fluency in R is highly desirable. Previous experience, e.g., internships in movement ecology-related subjects or previous work with geospatial data, is a plus. Interactions with Dr. Samantha Patrick and Dr. Thomas Clay from the University of Liverpool in the framework of the project [3, 4] should be expected.

The student will be expected to publish the results in peer-reviewed journals and present them at national/international conferences.

The Master's degree awarded will be either in Wildlife Ecology and Conservation or in Interdisciplinary Ecology (with concentrations in Geographic Information Systems, Mathematics or Statistics). The Master’s program will consist of three semesters mainly dedicated to classwork during the first year and a second year exclusively dedicated to the Master’s thesis. This position will be completely supported for the two years (stipend + tuition) and the program is expected to start in fall 2018.

Classwork during the first two semesters will take place on the main UF campus in Gainesville. Research will be performed at Dr. Mathieu Basille's lab [5], under the supervision of Dr. Basille and Dr. Rocio Joo [6]. Dr. Basille's lab is located at the University of Florida's Fort Lauderdale Research and Education Center (FLREC), in Davie, Florida. Davie is a town within the large Miami metropolitan area in South Florida, just miles away from the Florida Everglades.
Please apply by sending an email including a cover letter describing your interest, experience and career goals, a CV, unofficial transcripts and GRE scores, and contact information for three references to Dr. Rocio Joo (rocio.joo@ufl.edu). Write “master application” as the email subject. Applications will be processed in the order they are received until April 15th or before if a suitable applicant is found.

[1] https://seabirdsound.org/
[2] https://sites.google.com/site/statistiqueettrajectoires/