# The Evolution of Social Behaviour in the Lake Tanganyika Cichlid Radiation

Thursday, March 11th
11am-12pm ET

## Prof. Alex Jordan



Sociality is a complex concept, as it is neither a single trait that varies along a single axis, nor an agreed upon suite of traits. The Lamprologine cichlids of Lake Tanganyika are commonly described as varying in sociality, but the question remains as to what is actually different among these species. In this talk I will explore what we mean by differences in social complexity, how different species differ in social structure, and in particular focus on what behavioural and cognitive traits are required (or have evolved) in the transition from simple to complex social systems. I will focus on how novel approaches using machine-learning and behavioural decomposition can generate a quantitative approach to the comparative study of behaviour.

Prof. Jordan leads the Comparative Evolution of Social Behaviour Research Group at the Max Planck Institute of Animal Behavior, studying the ways single individuals come together to form much larger groups, and the behavioural, cognitive, and neuroanatomical mechanisms that need to evolve to facilitate group living. His group takes advantage of computational approaches — such as machine learning, automated tracking of behavior, and 3D reconstruction of environments — and is primarily field-focused, working in Lake Tanganyika, the Mediterranean Sea, coral reefs in the Caribbean and Red Sea, as well as Central American rainforests. In addition, Prof. Jordan is on the editorial boards of The American Naturalist and Movement Ecology. He is also active at the interface of science, art, and community engagement, working with artists and academies like SUPERFLEX, TBA-21, and Tomas Saraceno. Previously, Prof. Jordan was an Integrative Biology Fellow at UT Austin, and before that a JSPS fellow in Osaka. He completed his PhD with Rob Brooks at the University of Sydney.

Hosted by the Soft Math Lab.

**Contact:** Irina Tolkova
**Email:** itolkova@g.harvard.edu

**To attend, please register here.**

password: "cichlid"