

Postdoctoral Research Associate

— open position —

The [Dynamica research group](#) led by [Antoine Allard](#) and [Patrick Desrosiers](#) at [Université Laval \(Québec, Canada\)](#) seeks an exceptional candidate for a postdoctoral research associate, to work on an innovative project at the intersection of Network Science and the Ecology of Northern ecosystems. The initial term of the position is one year, with the possibility of up to one renewal, and will begin **no later than October 2019**. The project will be done in close collaboration with [Prof. Daniel Fortin \(Biology, Université Laval\)](#) and is an important part of [sub-project 1.1 of the Sentinelle Nord research initiatives](#).

Ideal candidates will have a strong mathematical and computing background; a strong track record of innovative research and publications in selective venues; and expertise in data science.

The project will focus on adapting existing and developing new modeling network tools for the geographical distribution of species in Northern Québec according to various ecological factors (local biodiversity, longitude, temperature). These models will be based on extensive datasets collected by Prof. Fortin's team and collaborators. Among other things these models will be used to better understand the data themselves (null models), will be compared to and used alongside traditional mathematical techniques, and will also be used to forecast the presence of indicator species in different Northern regions affected by climate change.

Qualifications:

- a Ph.D. (or equivalent) in Physics, Applied Mathematics, Computer Science, or in a quantitative branch of Ecology, or Biology, or in a similar field, conferred no later than August 2019;
- education or training in mathematical modeling, data analysis, and programming;
- strong verbal and written communication and presentation skills;
- a commitment to working in an interdisciplinary and collaborative environment.

Applicants should submit the following:

- a 1-page cover letter that succinctly describes your background and qualifications, and lists two published papers that illustrate your track record;
- a full curriculum vitae (CV);
- a 1-page statement of research interests and accomplishments;
- contact information for at least 2 references.

Applications are submitted by email to antoine.allard@phy.ulaval.ca with subject line “**SP 1.1 post-doc**”. Full consideration will be given to complete applications received **before July 27th 2019**.