**Trophic interaction models predict interactions across ecosystems, not food webs**

Dominique Caron1,2, Ulrich Brose3,4, Miguel Lurgi5,6, F. Guillaume Blanchet2,7,8,9, Dominique Gravel2,7, Laura J. Pollock1,2

**Affiliations**

1 Department of Biology, McGill University, Montreal, QC, Canada

2 Quebec Centre for Biodiversity Sciences, Montreal, QC, Canada

3 German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, Germany

4 Institute of Biodiversity, Friedrich Schiller University Jena, Jena, Germany

5 Department of Biosciences, Swansea University, Singleton Park, SA2 8PP. UK.

6 Centre for Biodiversity Theory and Modelling, Theoretical and Experimental Ecology Station, CNRS, Moulis, 09200 France.

7 Département de biologie, Université de Sherbrooke, Sherbrooke, QC, Canada

8 Département de mathématiques, Université de Sherbrooke, Sherbrooke, QC, Canada

9 Département des sciences de la santé communautaire, Université de Sherbrooke, Sherbrooke, QC, Canada

**Corresponding author:** Dominique Caron, [dominique.caron@mail.mcgill.ca](mailto:dominique.caron@mail.mcgill.ca)

**Acknowledgements**

This research was supported by an NSERC Discovery Grant (NSERC RGPIN-2019-05771). We thank Brian Leung and Luigi Maiorano for comments on the study design and results and Timothée Poisot for discussions on model calibration and validation.

**Biosketch**

Dominique Caron is a PhD student in the Quantitative Biodiversity Lab at McGill University in Montréal, Canada. Dominique’s thesis focuses on the seasonal and spatial variations of trophic interactions among terrestrial vertebrates. His research interests lie at the intersection of biogeography, food web ecology, and biodiversity modelling.