

# Alexandre Génin

## Education

- 2015-2018 **PhD**, *Institut des Sciences de l'Evolution, Montpellier*, advisor: Sonia Kéfi.
- 2011-2015 **Master's degree, major in Biology**, *École Normale Supérieure de Lyon*.
- 2010-2011 **Bachelor's degree, major in Earth and Planetary Science**, *École Normale Supérieure de Lyon*.

## Research experience

- 2015-2018 **PhD candidate**, *Institut des Sciences de l'Evolution de Montpellier, équipe BioDICée*, advisor: S. Kéfi.  
Ecological networks, stability and resilience of ecosystems
- 2012,2015 **Internship - M.S.**, *UC Berkeley/USGS*.  
Quantifying the response of alpine meadows to grazing disturbance in Sierra Nevada, California (with E. Berlow and S. Kéfi)
- 2013-2014 **Research associate**, *Trinity College, Dublin*.  
Non-trophic interactions and secondary extinctions in coastal food webs (in collaboration with I. Donohue and S. Kéfi)
- 2013-2014 **Internship - M.S.**, *Alpine Ecology Laboratory, Grenoble, France*.  
Transitions in flora communities and diversity patterns around the last glacial maximum (with W. Thuiller and L. Chalmandrier)
- 2012-2013 **Research associate**, *Chizé biological sciences center / Agro ParisTech*.  
Foraging behavior of Southern Elephant seals: new insights from sound loggers (with C. Guinet and MP. Étienne)

## Awards and Scholarships

- 2010-2018 **7-year scholarship covering Master's and PhD programs**.

## Languages

- French Native language
- English Fluent
- Spanish Very good command

## Computer skills

- General use  $\LaTeX$ , Office, >10 years of experience with linux systems
- Programming R (author of two published packages), Matlab, Shell script, scientific C and C++

## Field experience

- 2015-2018 Bird capture and ringing. Total of approx. 6 months experience over 4 years
- 2015-2018 Supervision of vegetation surveys in La Crau (France) (6 months)
- 2012 Vegetation surveys in Sierra-Nevada, California (2 months)
- 2012 Logger deployment on Southern Elephant Seals (*Mirounga leonina*) (2 months)

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## Publications

### 2018

6. **Génin, A.**, Majumder, S., Sankaran, S., Danet, A., Guttal, V., Schneider, F.D., Kéfi, S. (2018) Monitoring ecosystem degradation using spatial data and the R package *spatialwarnings*. *Methods in Ecology and Evolution*
5. **Génin, A.**, Majumder, S., Sankaran, S., Schneider, F.D., Danet, A., Berdugo, M., Guttal, V., Kéfi, S. (2018) Spatially heterogeneous stressors can alter the performance of indicators of regime shifts. (2018) *Ecological Indicators*

### 2017

4. Lee S. R., Berlow E. L., Ostoja S. M., Brooks M. L., **Génin, A.**, Matchett J. R., Hart S. C., A multi-scale evaluation of pack stock effects on subalpine meadow plant communities in the Sierra Nevada. (2017) *PLOS One*
3. Donohue, I., Petchey, O. L., Kéfi, S., **Génin, A.**, Jackson, A. L., Yang, Q., O'Connor, N. E. (2017) Loss of predator species, not intermediate consumers, triggers rapid and dramatic extinction cascades. *Global Change Biology*

### 2015

2. **Génin, A.**, Richard, G., Jouma'a, J., Picard, B., El Ksabi, N., Vacquié Garcia, J., et al. (2015). Characterization of postdive recovery using sound recordings and its relationship to dive duration, exertion, and foraging effort of southern elephant seals (*Mirounga leonina*). *Marine Mammal Science*, 31, 1452–1470

### 2014

1. Richard, G., Vacquie-Garcia, J., Jouma'a, J., Picard, B., **Génin, A.**, Arnould, J.P.Y., et al. (2014). Variation in body condition during the post-moult foraging trip of southern elephant seals and its consequences on diving behaviour. *Journal of Experimental Biology*, 217, 2609–2619

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## Presentations at international conferences

- 2 **Génin, A.**, Kéfi, S., The effect of grazing on plant-plant association networks *Ecology Across Borders (British Ecol. Society meeting, 2017)*
- 1 **Génin, A.**, Kéfi, S., Lee, S. R., Berlow, E. L., Characterizing and mapping alternative stable states as a tool to prevent long-lasting vegetation shifts in protected subalpine areas *Ecosummit, 2016*