

# Publications

## Journal articles

Chérel, Guillaume, Clémentine Cottineau, and Romain Reuillon (2015). “Beyond Corroboration: Strengthening Model Validation by Looking for Unexpected Patterns”. In: *PLoS ONE* 10.9, e0138212. URL: <http://dx.doi.org/10.1371/journal.pone.0138212>.

Gignoux, Jacques, Guillaume Chérel, Ian D. Davies, Shayne R. Flint, and Eric Lateltin (2017). “Emergence and complex systems: The contribution of dynamic graph theory”. In: *Ecological Complexity* 31, pp. 34–49.

## Peer-reviewed conferences and proceedings

Brasebin, Mickaël, Paul Chapron, Guillaume Chérel, Mathieu Leclaire, Imran Lokhat, Julien Perret, and Romain Reuillon (2017). “Apports des méthodes d’exploration et de distribution appliquées à la simulation des droits à bâtir”. In: *Actes du Colloque International de Géomatique et d’Analyse Spatiale (SAGEO 2017)*.

Chérel, Guillaume, Jacques Gignoux, and Jean-Daniel Zucker (2011). “Identifying and formalizing the multi-scale configuration of emergent properties”. In: *Proceedings of the Eighth International Conference on Complex Systems*. Ed. by Hiroki Sayama, Ali A. Minai, Dan Braha, and Yaneer Bar-Yam. Vol. 8. Unifying Themes in Complex Systems.

Chérel, Guillaume and Jean-Daniel Zucker (2010). “Mining Traces from Dynamic Complex Systems Models Simulations: an Application to the Cultaptation Social Learning Competition”. In: *WEIN 2010: Proceedings of the Fifth International Workshop on Emergent Intelligence on Networked Agents*.

Chérel, Guillaume (2010). *Choisir la bonne échelle d’observation : application à la modélisation de la dynamique spatiale des arbres dans la savane*. Commisco 2010.

## Book chapters

Chérel, Guillaume, Clémentine Cottineau, and Romain Reuillon (2017). “Using Models to Explore Possible Futures (Contingency and Complexity)”. In: *Urban Dynamics and Simulation Models*. Cham: Springer International Publishing, pp. 81–95.

## Pedagogical writing

Lavallee, François and Guillaume Chérel (2018). *Use Case OpenMOLE : Effective management strategies for an invasive plant, the Japanese knotweed*. OpenMOLE community blog. URL: <https://blog.openmole.org/user-case-management-of-japanese-knotweed/> (visited on 02/26/2019).

## For the general public

Chérel, Guillaume (2015). *PATTERN SPACE EXPLORATION: A new method to build robust models*. ISCPiF blog. URL: <https://iscpif.fr/2015/10/pse-testing/>.

## Invited talks

Chérel, Guillaume (2018). *Classifying Simulation Methods*. CCS2018 Satellite: New methods and epistemologies to explore simulation models, Thessaloniki, Greece.

Chérel, Guillaume (2013). *Détection et abstraction de l’émergence dans des simulations de systèmes complexes: application aux écosystèmes de savane*. Invited speaker, Institut de Recherche en Informatique de Toulouse, Toulouse 1 University, France.

Gueye, Mbaye Babacar and Guillaume Chérel (2011). *Différentes approches dans les pratiques de modélisation de systèmes complexes*. Programme doctoral international “Modélisation des systèmes complexes”, Bondy, France.

Ph.D. Thesis

Chérel, Guillaume (2013). "Détection et abstraction de l'émergence dans des simulations de systèmes complexes: application aux écosystèmes de savane."  
PhD thesis. Université Pierre et Marie Curie.