

# Philipp Getto

Basque Center for Applied Mathematics,  
Gran Via 35,2 E-48009 Bilbao, Spain  
getto@bcamath.org

## Numerical equilibrium analysis for structured consumer resource models

We concentrate on a size structured consumer population competing for an unstructured resource. In case of two free parameters stability boundaries can be traced in two-parameter space [4]. New points tracing the curves can be computed by using tangent prediction and Newton correction [1] and numerical integration to compute the involved maps. We rewrite the algorithms of [4] for the in [3] developed integral equation formulation. Moreover, we incorporate a maturation delay as in the model of *Daphnia Magna* consuming Algae of [2] leading to a discontinuity caused by an abrupt change of behavior at the size where juveniles turn adult. To test the algorithms, the paper will be supplemented by computations for the *Daphnia* model.

This is a joint work with A.M. de Roos from the University of Amsterdam, O. Diekmann from the University of Utrecht and M. A. Kirkilionis from the University of Warwick.

## References

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