

Call for papers

Canadian Journal of Agricultural Economics – 2009 Special issue “Computational Economics: Applications in Agriculture, Bio-resources and the Environment”

Editors: J. Nolan, D. Parker and R. Schoney.

The Canadian Journal of Agricultural Economics intends to publish a special issue in November 2009 on applications of modern computational economics to the environment, the agricultural and forestry sectors, and natural resources more broadly. The intended focus of the computational methods to be considered is in the areas of agent-based modeling, optimal control (e.g., dynamic programming, fuzzy programming), soft and rough computing, cellular automata, system dynamics, solution methods, and simulation approaches. Papers that focus on econometric solutions to the exclusion of other techniques will receive lower priority.

Motivation: Forty-five years ago, there were relatively few statisticians/econometricians using computers in applied research. The modern field of econometrics grew out of a major revolution in personal computing power and the development of user accessible software. While computational econometrics is now well established in agricultural and natural resource economics, the field of computational economics has emerged more recently (or re-emerged in the case of mathematical programming methods) as a result of rapid advances in personal hardware and software computing capabilities. This means that a variety of inherently complex economic processes that were not hitherto amenable to analytic study can now be modeled and examined in a meaningful fashion.

Complex economic processes are generally characterized by individual and environmental heterogeneity combined with feedbacks between economic decision makers as well as their environment, potentially also crossing spatial and temporal scales. In turn, complex processes often lead to analytical intractability. Traditional equilibrium-based modeling approaches become less attractive because of the presence of non-linearities, critical mass, thresholds, bifurcations, etc. For the special issue, we encourage authors to submit papers that primarily rely on computational and/or simulation methods to investigate the behaviours of complex economic processes in agricultural, environmental and resource economics.

Authors wishing to submit papers for the special issue should inform the managing editor of the CJAE (cjae@uvic.ca) regarding their intentions by submitting an abstract on or before 31 March 2008. Full papers are due in the CJAE editorial office by 30 September 2008. They will then undergo peer review, with final decisions regarding which papers will appear in the special issue to be made by 31 March 2009.