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Monica Gabriela Cojocaru*, 50 Stone Road East, Department of Mathematics & Statistics,
Guelph, ON N1G 2W1, Canada. *Solving generalized Nash games with shared constraints through
evolutionary variational inequalities.*

We show in this talk how a new parametrization technique can be introduced via the so-called evolutionary variational inequality (EVI) problems, such that by restricting the solution sets of such specialized EVI problems, together with complementarity conditions, we obtain a clear description of the solution set of a generalized Nash (GN) game with shared constraints. As a consequence, the stability of GN equilibria can be studied. We give examples of how the technique is used and show that it solves GN previously not solved by existing VI parametrization techniques. (Received September 17, 2013)