1067-49-2316   **Monica Gabriela Cojocaru*** (`mcojocar@uoguelph.ca`), Dept. Mathematics & Statistics, 50 Stone Road East, Guelph, Ontario N1G 2W1, Canada.
Hybrid systems for variational inequalities.

We relate variational inequalities, noncooperative games and hybrid dynamical systems so as to describe the disequilibrium evolution of an equilibrium problem (e.g. a dynamic network equilibrium problem or a dynamic game). We use a hybrid system with a switch & jump mechanism between continuous dynamic states given by a differential equation. The hybrid system also provides a way to analyze stability issues of hybrid solutions w.r.t. the problem's equilibrium states. (Received September 22, 2010)