

1035-49-1860

Munteanu Laura* (Laura.Munteanu@oneonta.edu), 2 Circle Dr., Sidney, NY 13838. *Sufficient Conditions for the Existence of (Bi)Simulation Relations for Nonlinear Control Systems*. Preliminary report.

We investigate sufficient conditions for the existence of (bi)simulation relations for nonlinear control systems. In particular, we discuss an algorithm for computing the maximal nonlinear (bi)simulation relation and we formulate sufficient conditions for certain sets to be submanifolds. (Received September 20, 2007)