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**Title:**

Stability of systems with dynamics depending on the maximum of solution over a prehistory

**Abstract:**

Systems with dynamics that depends on the maximum of the solution over some prehistory time interval are a special subclass of nonlinear infinite dimensional systems. Certain stability theory for them exists in the literature. So far such systems were considered without inputs. Our aim is to investigate their properties in case of existing input signals. We will consider some known results for such systems and discuss about several open problems related to stability, robustness and interconnections.