

1046-37-1326

Reinhard C Laubenbacher* (reinhard@vbi.vt.edu), Washington St., Blacksburg, VA 24061,
and **Abdul S Jarrah** and **Alan Veliz-Cuba**. *Dynamical systems over graphs: the relationship
between graph topology and dynamics.*

Time-discrete dynamical systems with a finite state space appear many applications in engineering and biology. In many cases, an important structural feature of these systems is that the variable dependencies can be expressed by a directed graph. The topology of this graph plays an important role in the determining the dynamics of the system. This talk will present some results about this relationship. (Received September 15, 2008)