1056-11-563 **Thomas J Tucker*** (tjtucker@gmail.com), Math Dept, University of Rochester, Rochester, NY 14610, and **Dragos Ghioca** and **Shouwu Zhang**. *The dynamical Manin-Mumford problem*.

We present counterexamples to the simplest formulation of a dynamical Manin-Mumford theorem, suggest possible modifications, and describe a series of results on rational functions giving the same canonical height (this may be viewed as a special case of the conjecture). (Received September 12, 2009)