

1067-13-1341

Craig Huneke and **Shunsuke Takagi*** (stakagi@math.mit.edu), Department of Mathematics, Massachusetts Institute of Technology, 77 Massachusetts Ave. Room 2-230, Cambridge, MA 02139, and **Kei-ichi Watanabe**. *On parameter F -jumping numbers*.

A parameter F -jumping number is a value of the coefficient at which the parameter test submodule, a positive characteristic analog of multiplier submodules, makes a jump. We study its properties and compare this invariant with another positive characteristic invariant, called F -thresholds. Also, we give a lower bound for the parameter F -jumping number associated to homogeneous parameter ideals in terms of their multiplicities. (Received September 20, 2010)