1139-37-40   **John R. Doyle*** (`jdoyle@latech.edu`), Department of Mathematics and Statistics, Louisiana Tech University, Ruston, LA 71272, and **Bjorn Poonen** (`poonen@math.mit.edu`), Department of Mathematics, Massachusetts Institute of Technology, Cambridge, MA 02139. *Dynamical modular curves and uniform boundedness of preperiodic points.*

Morton and Silverman's uniform boundedness conjecture (UBC) for preperiodic points of rational maps, originally stated over number fields, has a natural analogue over function fields. We will discuss a recent proof of the function field UBC for the unicritical family $f_c(z) = z^d + c$ with $d \geq 2$, which involves giving lower bounds on the gonalities of (the geometric components of) the associated dynamical modular curves. Finally, we will discuss how, for the unicritical family over number fields, these gonality bounds reduce the UBC for preperiodic points to the UBC for periodic points. (Received January 16, 2018)