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Chieh-Yu Chang, Department of Mathematics, National Tsing Hua University, Hsinchu, Taiwan, **Matthew A. Papanikolas*** (map@math.tamu.edu), Department of Mathematics, 3368 TAMU, Texas A&M University, College Station, TX 77843, and **Jing Yu**, Department of Mathematics, National Taiwan University, Taipei, Taiwan. *Eulerian multiple zeta values over function fields.*

A classical multiple zeta value (MZV) is said to be Eulerian if it is a rational multiple of a power of π . Examples of Eulerian MZV's abound and date back at least to Euler. In the setting of function fields over a finite field, Thakur defined multizeta values in direct analogy with classical MZV's, and Anderson and Thakur showed that they arise as periods of iterated extensions of the Carlitz motive. In this talk we will investigate a new criterion for determining when a function field MZV is Eulerian, in this case meaning that it is a rational multiple of a power of the Carlitz period. Furthermore we will discuss how this criterion can be used effectively to show whether or not a given MZV is Eulerian and present computational findings that confirm conjectures of Thakur and Lara Rodríguez. (Received January 17, 2015)