1172-13-335 **Eamon Quinlan-Gallego***, quinlan@math.utah.edu, and **Jack Jeffries** and **Luis Núñez-Betancourt**. *Differential thresholds.*

Let R be an F-finite ring of positive characteristic and $I \subseteq R$ be an ideal. Using the action of the ring of differential operators on R we introduce numerical invariants of the pair (R, I), which we call differential thresholds. When R is regular these coincide with the F-jumping numbers of I. In this talk we discuss the definition of these invariants, as well as some discreteness and rationality results. This is joint work with Jeffries and Núñez-Betancourt. (Received August 31, 2021)