

1173-13-217

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**Francesca Gandini, Milena Hering, Diane Maclagan, Fatemeh Mohammadi, Jenna  
Rajchgot and Josephine Yu.** *Toric and tropical Bertini theorems in positive  
characteristic.* Preliminary report.

We generalize the toric Bertini theorem of Fuchs, Mantova, and Zannier to positive characteristic. A key part of the proof is a new algebraically closed field containing the field  $k(t_1, \dots, t_d)$  of rational functions over an algebraically closed field  $k$  of prime characteristic. As a corollary, we extend the tropical Bertini theorem of Maclagan and Yu to arbitrary characteristic, which removes the characteristic dependence from the  $d$ -connectivity result for tropical varieties from that paper. (Received September 20, 2021)