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Oscar G. Villareal* (ovillare@gmail.com), 801 N Glassell St, Orange, CA 92867. *The Geyer-Jarden Conjecture in positive characteristic and the degree of torsion points.*

Let k be a finitely generated field, k_s a separable closure, and $G_k = \text{Gal}(k_s/k)$ the absolute Galois group. For an e -tuple $\sigma = (\sigma_1, \dots, \sigma_e) \in G_k^e$, let $k(\sigma)$ be the field fixed by $\sigma_1, \dots, \sigma_e$. Let A be an abelian variety over k . We give a criterion for finiteness of the torsion group $A_{tors}(k(\sigma))$ and we show that this condition is satisfied when A admits analytic uniformization at some place of k . (Received September 22, 2010)