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Chris Hall* (cha1114@uwyo.edu), **Jordan S. Ellenberg** and **Emmanuel Kowalski**. *Jumping ranks in families of elliptic surfaces.*

We apply a joint result with J. Ellenberg and E. Kowalski to study the ranks in a one-parameter family of elliptic surfaces over Q . Given a family, we consider the Mordell-Weil rank of the generic fiber. We also consider the set E_d of algebraic parameters of degree at most d over Q and whose fibers have strictly larger Mordell-Weil rank. We show that if the family has big monodromy, then E_d is finite for every d , and we exhibit families with big monodromy. (Received September 25, 2012)