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Unlikely Intersections and O-minimality

Conjectures on unlikely intersections generalize various problems in diophantine geometry such as the Manin-Mumford Conjecture. They originated in work of Bombieri-Masser-Zannier, Pink, and Zilber. Using a point counting result of Pila-Wilkie, Zannier devised a new strategy to prove the Manin-Mumford Conjecture.

After providing some background information I will describe some recent result on higher dimensional unlikely intersections in abelian varieties defined over number fields. This is joint work with Jonathan Pila.