

Exposé court

87 **The Hasse principle for intersections of two quadrics**

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One of the first non-trivial examples of geometrically rational varieties is given by geometrically integral non-conical intersections of two quadrics in the projective space \mathbb{P}^n ($n \geq 4$). In 1987 Colliot-Thélène, Sansuc and Swinnerton-Dyer proved the smooth Hasse principle for such a variety $X \subset \mathbb{P}^n$ over a number field when $n \geq 8$, they also conjectured that the smooth Hasse principle holds starting with the dimension $n = 6$. Thirty years later, Heath-Brown established the Hasse principle for smooth intersections of two quadrics in \mathbb{P}^7 . In the talk we will discuss the recent progress on this problem for singular intersections in \mathbb{P}^7 . (Based on arXiv:2305.00313.)