ON SOME RESULTS OF CHEVALLEY-WARNING TYPE

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Résumé: The Chevalley-Warning theorem, conjectured by Dickson in 1909, provides conditions which guarantee that a multivariable polynomial has a zero over a finite field in terms of the polynomial's degree and number of variables. This was generalized by Ax in 1964 in such a way that it gave a divisibility result for eigenvalues of the Frobenius on cohomology. We will discuss this and a further generalizations. The talk will be accessible to graduate students.

^{1.} Les jeudis matin, de 10 h 30 à 11 h 30, salle 004, IRMAR (bâtiment 22), Université de Rennes 1, Campus de Beaulieu