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Vinogradov's mean value theorem in function fields

Vinogradov's mean value theorem is about integer solutions of the system of equations $x_1^j + \dots + x_s^j = y_1^j + \dots + y_s^j$ ($1 \le j \le k$). In this talk, we will give a quick survey about the recent progress on this problem, based on Wooley's efficient congruencing method. Then we will talk about its generalizations to function fields. It is joint work with W. Kuo, T. Wooley, and X. Zhao.