1052-11-144   **Craig Valere Spencer*** (`craigvspencer@gmail.com`), Mathematics Department, 138 Cardwell
Hall, Manhattan, KS 66506. *Additive combinatorics in function fields.*

In this talk, we will discuss how the circle method can be used to study additive combinatorics in the function field setting. In particular, we will consider variants of Roth's theorem and questions concerning irreducible polynomials. Parts of this work are joint with Thái Hoàng Lê, Yu-Ru Liu, and Xiaomei Zhao. (Received August 25, 2009)