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Jenny Fuselier, Ling Long* (llong@math.lsu.edu), **Ravi Ramakrishna, Holly Swisher** and **Fang-Ting Tu**. *Hypergeometric functions over finite fields*.

Based on the developments of many people including Evans, Greene, Katz, McCarthy, and Rodriguez-Villegas, we study hypergeometric functions over finite fields in a manner that is parallel to the classical hypergeometric functions. Using this method, we obtain several types of hypergeometric formulas over finite fields, including some analogues of formulas by Ramanujan. (Received September 15, 2015)