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On good polynomials over finite fields for optimal locally recoverable codes

A locally recoverable (LRC) code is a code that enables a simple recovery of an erased symbol by accessing only a small number of other symbols. LRC codes form one of the rapidly developing topics in coding theory because of their applications in distributed and cloud storage systems. Tamo and Barg have presented a family of LRC codes that attain the maximum possible distance. The key ingredient for constructing such optimal LRC codes is the so-called r -good polynomials, where r is the locality of the LRC code. In this talk, we discuss new good polynomials for constructing optimal LRC codes.