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([h.lopezvaldez@csuohio.edu](mailto:h.lopezvaldez@csuohio.edu)) and **Fernando Piñero**. *Explicit optimal-length locally repairable codes of distance 5.*

Locally repairable codes (LRCs) have received significant recent attention as a method of designing data storage systems robust to server failure. Optimal LRCs offer the ideal trade-off between minimum distance and locality, a measure of the cost of repairing a single codeword symbol. For optimal LRCs with minimum distance greater than or equal to 5, block length is bounded by a polynomial function of alphabet size. In this talk, we give explicit constructions of optimal length (in terms of alphabet size), optimal LRCs with minimum distance equal to 5. (Received January 10, 2019)