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**Pu Gao\*** (p3gao@uwaterloo.ca), 200 University Ave W, Waterloo, ON N2L 3G1, Canada, and  
**Amin Coja-Oghlan.** *Rank of random matrices over finite fields.*

We determine the rank of a random matrix  $A$  over a finite field with prescribed numbers of non-zero entries in each row and column. As an application we obtain a formula for the rate of low-density parity check codes. This formula verifies a conjecture of Lelarge [Proc. IEEE Information Theory Workshop 2013]. The proofs are based on the Aizenman–Sims–Starr coupling scheme from mathematical physics. (Received January 22, 2019)