On Kloosterman sums

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Abstract: It is a survey on Kloosterman sums. We consider known results mostly on classical Kloosterman sums, i.e. sums over finite fields $\mathbb{F}_q$ of order $q = p^m$, $p \geq 2$ is prime. This paper is based on joint papers with Tor Helleseth, Pascale Charpin and Leonid Bassalygo.