

## Code Constructions Based on Reed-Solomon Codes

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Reed–Solomon codes are a well–studied code class which fulfill the Singleton bound with equality. However, their length is limited to the size  $q$  of the underlying field  $\mathbb{F}_q$ . In this paper we present a code construction which yields codes with lengths of factors of the field size. Furthermore a decoding algorithm beyond half the minimum distance is given and analyzed.