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Asymptotic Constructibility of Covering Arrays

It has long been known that the optimal asymptotic size of a strength 2 covering array, $CA(2, k, v)$ is

$$\frac{v \log_2 k}{2}(1 + o(1))$$

but this result is non-constructive. We present the current best asymptotic constructibility of strength 2 covering arrays. This requires a brief survey of general purpose constructions, their compatibility and one result on the distribution of primes.