s-PD-sets for codes from projective planes $\mathrm{PG}(2, 2^h)$, $5 \leq h \leq 9$

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In this talk we will describe a construction of 2-PD-sets of 16 elements for codes from the Desarguesian projective planes $\mathrm{PG}(2, q)$, where $q = 2^h$ and $5 \leq h \leq 9$. We will also describe a construction of 3-PD-sets of 75 elements for the code from the Desarguesian projective plane $\mathrm{PG}(2, q)$, where $q = 2^9$. These 2-PD-sets and 3-PD-sets can be used for partial permutation decoding of codes obtained from the Desarguesian projective planes. The constructions have been published in [1].

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References

[1] D. Crnković, N. Mostarac, B. G. Rodrigues, L. Storme, s-PD-sets for codes from projective planes $\mathrm{PG}(2, 2^h)$, $5 \leq h \leq 9$. *Advances in Mathematics of Communications* **15** (2021), No. 3, 423–440.