Lamken, Esther R.; **Rees, Rolf**; **Vanstone, Scott**
Class-uniformly resolvable pairwise balanced designs with block size two and three. (English)
Zbl 0749.05011
Discrete Math. 92, No. 1-3, 197-209 (1991).

A pairwise balanced design (PBD) is a pair (X, B), where X is a set of points and B is a collection of subsets of X called blocks, such that each pair of points is contained in exactly one block. A parallel class of blocks in a PBD is a subset of B which partitions the point set, and a PBD is called resolveable if B admits a partition $B_1, \ldots, B_k$ into parallel classes. A class-uniformly resolvable pairwise balanced design CURD$(K; p, r)$ is a PBD on p points, with block sizes from the set K, whose block set can be resolved into r parallel classes, each parallel class containing a fixed number a_k of blocks of size $k \in K$. The authors indicate why such designs arise, and give some examples for $K = \{2, 3\}$.

Reviewer: E.J.F.Primrose (Leicester)

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05B05   Combinatorial aspects of block designs

Cited in **2** Reviews
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