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Kreher, Donald L. (1-RIT); **Radziszowski, Stanisław P.** (1-RIT)

The existence of simple 6-$(14,7,4)$ designs.

J. Combin. Theory Ser. A **43** (1986), *no.* 2, 237–243.

The authors construct two nonisomorphic cyclic 5-$(13,6,4)$ designs which are pairwise disjoint and partition all of the $\binom{13}{6}$ 6-subsets, and then extend them to two nonisomorphic 6-$(14,7,4)$ designs using the extension theorem of W. O. Alltop [same journal Ser. A 18 (1975), 177–186; MR 51#10131]. The 6-designs are the smallest nontrivial designs that can exist. *Chung Je Cho* (KR-SOOK)