

Zbl 361.05037

Erdős, Paul

Problems and results in combinatorial analysis. (In English)

Colloq. int. Teorie comb., Roma 1973, Tomo II, 3-17 (1976).

[For the entire collection see Zbl 348.00004.]

This paper and the paper considered in the next review are continuations of a series of expository papers by the author in which he surveys a number of combinatorial problems on which he and his collaborators have worked. The first four sections of this paper deal with extremal problems on graphs and hypergraphs, and the fifth section is devoted to problems on subsets of a set; several of these problems involve constructions related to block designs. The last section, containing some miscellaneous problems, concludes with the following conjecture. Let A_1, \dots, A_n denote n sets of size n any two of which have at most one element in common. Is it possible to colour the elements of $\cup A_1$ with n colours so that each set A_1 contains an element of each colour?

Classification:

05C35 Extremal problems (graph theory)

05A05 Combinatorial choice problems

05C15 Chromatic theory of graphs and maps

00A07 Problem books