Zbl 251.04004

Erdős, Paul

Problems in combinatorial set theory. (In English)

Combinat. Struct. Appl., Proc. Calgary internat. Conf. combinat. Struct. Appl., Calgary 1969, 97-100 (1970).

[For the entire collection see Zbl 243.00004.]

Several solved and unsolved problems on partition calculus are discussed. Here I only state those problems which are mentioned in the paper and which have been solved since then. Jean Larson and Eric Milner proved $\omega^{\omega} \to (\omega^{\omega}, n)^2$, Baumgartner and Hajnal proved $\lambda \to (\alpha, \dots, \alpha)^2$ for every $\alpha < \omega_1$, Nosal has several new results on $\omega^l \to (\omega^n, m)^2$ and Laver proved several of our conjectures on ordered sets, and last but not least Hajnal proved $\omega_1^2 \to (\omega_1^2, 3)^2$. The later results of Hajnal and Baumgartner give a complete discussion of the truth value of $\omega_{\alpha}^2 \to (\omega_{\alpha}^2, 3)^2$.

Classification:

04A10 Ordinal and cardinal numbers; generalizations

05A17 Partitions of integres (combinatorics)

05-02 Research monographs (combinatorics)

04A20 Combinatorial set theory

00A07 Problem books