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Partition relations for η_α -sets (In English)

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In terms of the partition symbol [see *P. Erdős, A. Hajnal and R. Rado*, Acta math. Acad. Sci. Hungar. 16, 93-196 (1965; Zbl 158.26603)] the main result proved in this paper is that if \aleph_α is regular, $\aleph_\alpha > \aleph_\beta$ and GCH holds, then $\eta_\alpha \rightarrow (\eta_\alpha, \aleph_\beta)^2$. It is not known whether the relations $\eta_\omega \rightarrow (\eta_\omega, \aleph_0)^2$, $\eta_\omega \rightarrow (\eta_\omega, 3)^2$ hold. For the partitioning of triplets it is shown that, for any order type φ , $\varphi \mapsto (\omega + \omega^*, 4)^3$, $\varphi \mapsto (\omega^* + \omega, 4)$, $\varphi \mapsto (\omega + \omega^* \text{ or } \omega^* + \omega, 5)^3$. It remains an open question whether this last relation holds with 4 in place of 5.

Classification:

04A20 Combinatorial set theory