

Combinatorial structure of k -semiprimitive matrix families

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Abstract

© 2016 Russian Academy of Sciences (DoM), London Mathematical Society, Turpion Ltd. Protasov's Theorem on the combinatorial structure of k -primitive families of non-negative matrices is generalized to k -semiprimitive matrix families. The main tool is the binary relation of colour compatibility on the vertices of the coloured graph of the matrix family. Bibliography: 14 titles.

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Keywords

Coloured graphs, Nonnegative matrices, Perron-frobenius theorem