

Edge colouring permutation graphs

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Permutation graphs are cubic graphs admitting a 2-factor consisting of two chordless cycles. Despite the simple structure, the edge colouring properties of these graphs are interesting – in particular, infinitely many of them are snarks [2], but some problems are a lot more tractable for permutation graphs than for cubic graphs in general (for instance, the 4-flow conjecture becomes much easier [1, 3]). We will give an overview of known results and open problems in this area, and add an observation on the list edge colouring of permutation graphs.

REFERENCES

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