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SPLITTABILITY OF PERMUTATION CLASSES

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We say that a permutation p is ‘merged’ from permutations q and r , if we can color the elements of p red and blue so that the red elements are order-isomorphic to q and the blue ones to r . We say that a hereditary permutation class C is ‘splittable’, if it has two proper hereditary subclasses A and B such that any element of C can be obtained by merging an element of A with an element of B . In my talk, I will point out a connection between splittability of certain permutation classes and the notion of chi-boundedness of circle graphs. I will also explain how the notion of splittability helps in enumerating families of pattern-avoiding permutations, and how splittability relates to several other previously studied Ramsey-type properties.