

## ON THE PARTITION LATTICE OF AN INTEGER

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Received March 23, 2015

The partition lattice of an integer introduced by T. Brylawski is studied. The aim is to give a detailed validation to a new practically convenient method of specifying an order relation and to algorithms for finding the intersection and the union of elements in this lattice. Our method of specifying an order relation and the union and intersection of elements in the partition lattice of a positive integer provides new opportunities for applying such lattices in the study of chromatic polynomials of complete multipartite graphs.

Keywords: integer partition, lattice, Ferrer's diagram.

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Cite this article as:

V. A. Baransky, T. A. Koroleva, T. A. Sen'chonok, On the partition lattice of an integer, *Tr. Inst. Mat. Mekh. UrO RAN*, 2015, vol. 21, no. 3, pp. 30–36.