Minimally Intersecting Set Partitions of Type B

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Abstract: Motivated by Pittel's study of minimally intersecting set partitions, we investigate minimally intersecting set partitions of type B. We find a formula for the number of minimally intersecting r-tuples of B_n-partitions, as well as a formula for the number of minimally intersecting r-tuples of B_n-partitions without zeroblock. As a consequence, it follows the formula of Benoumhani for the Dowling number in analogy to Dobinski's formula.

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Keywords: minimally intersecting B_n-partitions, Dobinski's formula, the Dowling number.

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