

Interval Orders with Length Bounds

Simona Boyadzhyska, Berlin Mathematical School, Garth Isaak*, Lehigh University,
Ann Trenk, Wellesley College

Interval orders, representable by the ‘before’ relation on a set of intervals, have a long history, as do variants with bounds on the interval lengths. We review a general model based on linear programming duality and on shortest paths in an auxiliary digraph that determines if an order can be represented subject to given length bounds. We then use this approach to give a surprisingly complex forbidden suborder characterization for the case when each interval has a prespecified length of 1 or 2.

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