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Hamilton cycles in restricted block-intersection graphs

Given a BIBD(v, k, λ) with block set $\mathcal{B}$, its i-block-intersection graph is the graph having vertex set $\mathcal{B}$ such that two vertices B_1 and B_2 are adjacent if and only if $|B_1 \cap B_2| = i$. It has been known since 1999 that the 1-block-intersection graph of any λ-fold triple system on $v \geq 12$ points is Hamiltonian. We now consider restricted block-intersection graphs of BIBDs with larger block sizes.