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*Jump operations for Borel graphs*

We introduce a jump operation on bipartite Borel graphs, defined by analogy with Louveau's jump operation on Borel equivalence relations. We show that if  $G$  is a bipartite Borel graph, then the jump of  $G$  is a bipartite Borel graph which has no Borel homomorphism to  $G$  (though  $G$  has a Borel homomorphism to its jump). We also consider a jump analogous to the Friedman-Stanley jump, where there are interesting open questions. We use this jump operation to answer a question of Kechris and the speaker. This is joint work with Adam Day.