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Notre Dame, IN 46556, and **Charles McCoy, Alexandra Soskova and Stefan Vatev**. *Strong
jump inversion*. Preliminary report.

A structure \mathcal{A} admits *strong jump inversion* if for any set X , if \mathcal{A} has a copy that is low over X , then it has an X -computable copy. In particular, if there is a low copy, then there is a computable copy. Downey and Jockusch [?] showed that every Boolean algebra admits strong jump inversion. The second author [?] showed that certain linear orderings do, in particular, those in which every element lies on a discrete set, and either the discrete sets are all finite, with a bound on the sizes, or else, any infinite interval properly contains maximal discrete sets of size at least n for all n . There are other examples: special kinds of trees, groups, and equivalence structures. We look for general conditions sufficient to account for many of these examples.

References

- [1] R. Downey and C. G. Jockusch, “Every low Boolean algebra is isomorphic to a recursive one”, *PAMS*, vol. 122(1994), pp. 871-880.
- [2] A. N. Frolov, “Low linear orderings”, *Journal of Logic and Computation*, vol. 22(2012), pp. 745-754.

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