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Antonio Montalban* (antonio@math.uchicago.edu), Department of Mathematics, Univ. of Chicago, 5734 S University ave., Chicago, IL 60637. *When low information is no information.*

It is been conjectured that if a Boolean algebra has a low_n presentation, it has a computable presentation. We look at another class of structures where this behavior does occur, namely the class of linear ordering with finitely many descending cuts. This is joint work with Asher Kach and Joe Miller.

We will also look at the atom relation of Boolean algebras. Here, we have that complete information implies high information. We show that every high_3 computable enumerable degree appears in the spectrum of the atom relation of any computable Boolean algebra with infinitely many atoms. (Received August 01, 2008)