## A new proof of Maclagan's theorem

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Abstract. Maclagan's theorem [1] states that every antichain of monomial ideals is finite. We present a new proof of this theorem and discuss some of its consequences in the combinatorics of universal Gröbner bases. The proof is based on a sufficient condition that the set of ideals of a noetherian poset is again noetherian.

## References

 Diane Maclagan, Antichains of monomial ideals are finite. Proc. Amer. Math. Soc. 129 (2001), 1609-1615

[2] Rado, R. (1954), Partial well-ordering of sets of vectors. Mathematika, 1: 89-95.

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