

A new proof of non-Cohen-Macaulayness of Bertin's example

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Bertin's example is famous as the first known Noetherian UFD that is not Cohen-Macaulay. In the example, she employed a ring of invariants and proved that the ring is not Cohen-Macaulay by calculating a homogeneous system of parameter and generators of it. In this talk, we give a new proof by arguments on ring theoretic properties and describe a generalization of our new method of proof.

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