

Homological properties of a family of quotients of the Rees algebra

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Abstract. Let R be a commutative ring, a, b be elements of R , and let $I \neq 0$ be a proper ideal of R . We investigate some homological properties of the family of quotients of the Rees algebra $R(I)_{a,b}$, which was introduced by Barucci *et al.* In particular, we study the transferring of being partial n -tilting, Gorenstein projective, Gorenstein injective and Gorenstein flat between R and $R(I)_{a,b}$.

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