

1027-16-114

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Iowa City, IA 52242. *Quasitilted Rings*. Preliminary report.

Happel, Reiten and Smalø introduced quasitilted artin algebras as the endomorphism rings  $A$  of tilting objects in hereditary locally finite abelian categories. They characterized these algebras as those with a split torsion theory  $(\mathcal{X}_0, \mathcal{Y}_0)$  in  $\text{mod-}A$  with  $A_A \in \mathcal{Y}_0$  and  $\text{proj dim } \mathcal{Y}_0 \leq 1$ , and they proved that then  $\text{inj dim } \mathcal{X}_0 \leq 1$  and  $\text{gl dim } A \leq 2$ . In a recently appearing paper with R. Colpi, we called a ring  $R$  admitting a split torsion theory  $(\mathcal{X}, \mathcal{Y})$  in  $\text{Mod-}R$  with  $R_R \in \mathcal{Y}$  and  $\text{proj dim } \mathcal{Y} \leq 1$  a right quasitilted ring, and we characterized these rings as endomorphism rings of tilting objects in hereditary cocomplete abelian categories. Consequently then,  $\text{inj dim } \mathcal{X} \leq 1$  and  $\text{rt gl dim } R \leq 2$ . Moreover we posed two questions: Are quasitilted algebras quasitilted rings? If  $\text{rt gl dim } R \leq 2$  and every right  $R$ -module  $M$  decomposes as  $M = X \oplus Y$  with  $\text{inj dim } X \leq 1$  and  $\text{proj dim } Y \leq 1$  is  $R$  right quasitilted? We shall discuss E. Gregorio's affirmative answer to the first question and a possible approach to the second question suggested by M. Saorín. (Received February 22, 2007)