

ON THE HALL PRODUCT OF PREINJECTIVE  
KRONECKER MODULES

CSABA SZÁNTÓ

**Abstract.** Using some results on the Hall algebra of the Kronecker algebra  $kK$  over the finite field  $k$ , we describe the Hall product of a finite number of isoclasses of preinjective indecomposable Kronecker modules. More precisely, we will characterize those isoclasses which appear with nonzero coefficient in the previously mentioned Hall product. A dual statement can be formulated also for preprojective modules.

**MSC 2000.** 16G20.

**Key words.** Kronecker algebra, Hall algebra, preinjective modules.

**Acknowledgements** The author thanks to the Institute for Research Programs of the Sapientia Foundation for support through an individual research grant in the period 2004/2005.

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Received March 26, 2005

*Faculty of Mathematics and Computer Science  
“Babeş-Bolyai” University  
Str. M. Kogălniceanu nr. 1  
400084 Cluj-Napoca, Romania  
E-mail: szanto@math.ubbcluj.ro*