

# JORDAN ISOMORPHISMS OF GENERALIZED STRUCTURAL MATRIX RINGS

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**ABSTRACT.** The present paper is concerned with the study of the sub-bimodules of matrix bimodules over two structural matrix rings. Structural matrix bimodules arise as particular such sub-bimodules, and we discuss when such a bimodule is faithful or indecomposable. As an application, we obtain a large class of rings whose Jordan isomorphisms are either ring isomorphisms or ring anti-isomorphisms. Complete upper block triangular matrix rings over 2-torsion free indecomposable rings are elements of this class.

This is joint work with S. Dăscălescu and L. van Wyk.