

1136-16-205

Adel Alahmadi, Hamed Alsulami, Surender Jain and Efim Zelmanov*
(efim.zelmanov@gmail.com), La Jolla, CA 92130. *ON MATRIX WREATH PRODUCTS OF ALGEBRAS*. Preliminary report.

We introduce a new construction of matrix wreath products of algebras that is similar to the construction of wreath products of groups introduced by L. Kaloujnine and M. Krasner. We then illustrate its usefulness by proving embedding theorems into nitely generated algebras and constructing nil algebras with prescribed Gelfand-Kirillov dimension. (Received January 15, 2018)