
The upper triangular algebra loop of degree 4

K.W. Johnson, Michael Munywoki and J.D.H. Smith*

Iowa State University

A natural loop structure is defined on the set U_4 of unimodular upper-triangular matrices over a given field. Inner mappings of the loop are computed. It is shown that the loop is non-associative and nilpotent, of class 3. A detailed listing of the loop conjugacy classes is presented.