1035-17-855 Cristina Draper* (cdf@uma.es), Málaga, Spain, and Cándido Martín and Antonio Viruel. Fine gradings on e_6 .

We determine all the fine group gradings on the exceptional Lie algebra \mathfrak{e}_6 , or equivalently, the maximal abelian diagonalizable groups of the automorphism group of \mathfrak{e}_6 .

There are 9 of such gradings. (Received September 17, 2007)