EXTENDED JACOBSON DENSITY THEOREM FOR GRADED RINGS WITH DERIVATIONS AND AUTOMORPHISMS

TUNG-SHYAN CHEN, CHIU-FANG HUANG AND JING-WHEI LIANG

ABSTRACT. In this talk, we first introduce graded Jacobson radicals, graded local modules, M-outer derivations and M-outer automorphisms of graded rings. After that, we show a version of the Chevalley-Jacobson density theorem for graded rings with derivations and automorphisms. Furthermore, some applications of the density theorem concerning derivations in graded rings are presented.

GENERAL EDUCTION CENTER, NATIONAL CHIN-YI UNIVERSITY OF TECHNOLOGY, TAICHUNG COUNTY, TAIWAN 411

E-mail address: chentsn@gmail.com