MULTIPLIERS OF HILBERT PRO–C∗–BIMODULES AND CROSSED PRODUCTS BY HILBERT PRO–C∗–BIMODULES

MARIA JOIT¸A, RADU-B. MUNTEANU AND IOANNIS ZARAKAS

Abstract. In this paper we introduce the notion of multiplier of a Hilbert pro-C∗-bimodule and we investigate the structure of the multiplier bimodule of a Hilbert pro-C∗-bimodule. We also investigate the relationship between the crossed product A ×X Z of a pro-C∗-algebra A by a Hilbert pro-C∗-bimodule X over A, the crossed product M(A) ×M(X) Z of the multiplier algebra M(A) of A by the multiplier bimodule M(X) of X and the multiplier algebra M(A ×X Z) of A ×X Z.

Mathematics subject classification (2010): Primary 48L08, 48L05.

Keywords and phrases: Pro-C∗-algebras, pro-C∗-bimodules, multipliers, crossed products.

REFERENCES