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INTEGRAL FUNCTIONALS ON C^* -ALGEBRA OF VECTOR-VALUED REGULATED FUNCTIONS

L. A. O. FERNANDES¹ AND R. ARBACH^{2*}

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ABSTRACT. In this paper we deal with the notion of regulated functions with values in a C^* -algebra \mathcal{A} and present examples using a special bi-dimensional C^* -algebra of triangular matrices. We consider the Dushnik integral for these functions and shows that a convenient choice of the integrator function produces an integral homomorphism on the C^* -algebra of all regulated functions $G([a, b], \mathcal{A})$. Finally we construct a family of linear integral functionals on this C^* -algebra.

¹ DEPARTMENT OF MATHEMATICS, FACULTY OF ENGINEERING OF ILHA SOLTEIRA - STATE UNIVERSITY OF SAO PAULO - **UNESP**, ILHA SOLTEIRA SP BRAZIL.

E-mail address: lafo@mat.feis.unesp.br

² DEPARTMENT OF MATHEMATICS, FACULTY OF ENGINEERING OF ILHA SOLTEIRA - STATE UNIVERSITY OF SAO PAULO - **UNESP**, ILHA SOLTEIRA SP BRAZIL.

E-mail address: roseli@mat.feis.unesp.br

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* Corresponding author.

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