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ACTIONS OF ARITHMETIC FUNCTIONS ON MATRICES AND CORRESPONDING REPRESENTATIONS

ILWOO CHO^{1*} AND PALLE JORGENSEN²

Dedicated to Professor Tsuyoshi Ando

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ABSTRACT. In this paper, we study a class of representations of arithmetic functions, and corresponding operator-theoretic and free probabilistic properties. We associate given arithmetic functions f to certain matrices $\alpha_n(f)$.

ST. AMBROSE UNIV., DEPT. OF MATH., 421 AMBROSE HALL, 518 W. LOCUST ST.,
DAVENPORT, IOWA, 52803, USA.

E-mail address: choilwoo@sau.edu

UNIV. OF IOWA, DEPT. OF MATH., 14 MCLEAN HALL, IOWA CITY, IOWA, 52242, USA.

E-mail address: palle-jorgensen@uiowa.edu

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*Corresponding author.

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