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## On trigonometric polynomials in the $L_1$ -algebra of compact hypergroups

Liliana PAVEL

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**Abstract** - Let  $K$  be a compact hypergroup. We prove that the trigonometric polynomials on  $K$  form a dense two-sided ideal of the convolution algebra  $L_1(K)$ . As an application, when  $K$  is commutative, we rediscover the structure of multiplicative linear functionals on the Banach algebra  $L_1(K)$ .

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