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Nikolai Vasilevski* (nvasilev@math.cinvestav.mx), Department of Mathematics,
CINVESTAV del I.P.N. Mexico City, Mexico. *Commutative C^* -algebras of Toeplitz operators,
Berezin quantization, and geometry.*

A family of recently discovered commutative C^* -algebras of Toeplitz operators on the unit disk can be classified as follows. Each pencil of hyperbolic straight lines determines a set of symbols consisting of functions which are constant on the corresponding cycles, i.e. on the orthogonal trajectories to the lines forming a pencil. The C^* -algebra generated by Toeplitz operators with such symbols turns out to be commutative. We show that these cases are the only possible ones which generate the commutative C^* -algebras of Toeplitz operators on each weighted Bergman space. (Received February 02, 2004)