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Alma Itzel García*, Av. Instituto Politécnico Nacional No.2508, Col. San Pedro Zacatenco,
07360 D.F., Mexico. *Commutative Algebras of Toeplitz Operators.*

Recent works has characterized completely commutative C^* -algebras generated by Toeplitz operators on the unit disk of the complex plane. The symbols of Toeplitz operators that generate such algebras are very specifically related to the disk geometry. This relationship is due to Differential and Hyperbolic Geometry: definition symbols are associated with pencils of geodesic through cycles in \mathbb{D} in which the symbols are constants. The commutativity of these C^* -algebras is shown by isomorphisms with more known algebras, while the uniqueness is obtained from the equivalence between the existence of a pencil of geodesics with certain conditions on a set of defined and the commutativity of the C^* -algebra generated by Toeplitz operators with symbols in such set. (Received April 28, 2013)