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Armando Sánchez-Nungaray* (armandos@cimat.mx), Jalisco s/n, Mineral de Valenciana, 36240 Guanajuato, Guanajuato, Mexico. *Commutative algebras of Toeplitz operators on the super disc*. Preliminary report.

The spectral theory of commutative C^* -algebras of Toeplitz operators on Bergman spaces was constructed and developed by Nikolai Vasilevski and his coauthors during the last decade.

They show that on the unit disc the C^* algebra generated by Toeplitz operators is commutative on each (commonly considered) weighted Bergman space if and only if there is a maximal commutative subgroup of the Möbius transformation such that the symbols of the Toeplitz operators are invariant under the action of this subgroup, these algebras coincide exactly with the three known types (circle(S^1), reals(\mathbf{R}) and positive reals(\mathbf{R}_+)) of the commutative algebras on the unit disk.

In this talk, we extended this ideas to supermathematics in particular by the super disc and found five types of commutative algebras of Toeplitz on the super disc. This types corresponding to super-circle, super-reals, torus, $S^1 \times \mathbf{R}$ and $S^1 \times \mathbf{R}_+$ which are maximal commutative subgroups of isometries on the super disc. (Received April 08, 2010)