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Sofya S Masharipova* (ssm57@pitt.edu), Department of Mathematics, University of Pittsburgh at Johnstown, 450 Schoolhouse Road, Johnstown, PA 15904. *Positivity and geometry of unit balls in operator algebras on Pontryagin space* Π_1 . Preliminary report.

In the work we study positivity for operators and geometry of unit balls on symmetric algebras of bounded linear operators on Pontryagin space Π_1 . Consideration of all possible cases is based on structure of cones of positive linear operators. Geometry of unit balls of symmetric algebras of operators on Pontryagin space Pi_1 is studied. Connection with V. S. Shulman's types of such algebras is described (see Math. Sbornik, 1972, No 2). (Received September 23, 2017)