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Erling Stormer* (erlings@math.uio.no), Dept. of Math. University of California, Berkeley, Berkeley, CA 94720. *Multiplicative properties of positive maps of operator algebras.*

Let L be a positive unital map of a C^* -algebra A into itself. Then there is a Jordan subalgebra C of A such that the restriction of L to C is a Jordan homomorphism of C onto itself. If there exists a faithful family of L -invariant states on A then the restriction of L to C is a Jordan automorphism, and C is the largest Jordan subalgebra for which this is true. Furthermore, if A is a von Neumann algebra, L normal, and the invariant states are normal, then each weak limit point of the sequence $(L^n(a))$ for a in A , belongs to C . Connections with recent work of Arveson is also discussed. (Received August 15, 2006)