1049-46-86　　　　　**Lajos Molnar*** (`molnarl@math.klte.hu`), Institute of Mathematics, University of Debrecen, P.O. Box12, Debrecen, H-4010, Hungary. *Transformations on the space of positive operators.*

The study of the space of positive operators acting on a Hilbert space is of some importance for several reasons. In this talk we consider transformations on that space (or some of its subspaces) which preserve certain operations or numerical quantities. Namely, we give complete descriptions of bijective transformations which preserve operations such as the Jordan triple product or an operator mean (geometric, harmonic, arithmetic). Similar results for bijective transformations preserving numerical quantities such as the Thompson distance or the Hilbert projective distance are also presented. (Received February 23, 2009)