Some recently obtained structural results for maps on matrix algebras (or their subsets) having certain algebraic or preserving properties will be presented. For example, we will consider maps on the set of idempotents preserving usual partial order or orthogonality. Connections with physics and geometry will be disscused.

PETER SEMRL, University of Ljubljana, Dept. of Math., Jadranska 19, SI-1000 Ljubljana *Maps on matrix spaces*