



**Peter Semrl** (peter.semrl@fmf.uni-lj.si) Department of Mathematics, University of Ljubljana, 1000 Ljubljana, Slovenia, *Symmetries on bounded self-adjoint operators*.

ABSTRACT. Bounded self-adjoint operators represent bounded observables in the mathematical foundations of quantum mechanics. Two bounded observables are compatible if they can be measured jointly. This is equivalent to the fact that the corresponding self-adjoint operators commute. Symmetries with respect to compatibility are bijective maps on bounded self-adjoint operators preserving commutativity in both directions. We can similarly define symmetries with respect to other relations or properties. The problem is to describe the general form of such maps. We will present some recent results in this direction.