Projections and operator symmetry in Hilbert space

Abstract

In this talk we address the characterisation of Hermitian projections and of the so-called structural projections on subspaces of the space B(H,K) of bounded linear operators between the complex Hilbert spaces H and K. A particular attention will be given to the spaces of symmetric and antisymmetric operators relative to a conjugation on H. We present some explicit formulas obtained and discuss work in progress.