# A new estimate in the subspace perturbation problem

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We study the problem of variation of spectral subspaces for bounded linear self-adjoint operators. We obtain a new estimate on the norm of the difference of two spectral projections associated with isolated parts of the spectrum of the perturbed and unperturbed operators. The result is discussed for off-diagonal perturbations. In this case this improves a result obtained earlier by Kostrykin, Makarov and Motovilov in [Trans. Amer. Math. Soc. (2007)].

This talk is based on a joint work with K. A. Makarov.