MAN DUEN CHOI, Department of Mathematics, University of Toronto, Toronto, Ontario M5S 3G3 The ultimate norm estimate for complex matrices

It is often a complicated matter to estimate the  $C^*$ -norm (the usual Hilbert-space operator-norm) of a complex matrix. Nevertheless, an ultimate answer (without hard computation) can be sought for the best bound of the norm of T = A + iBwhere A and B are (non-commuting) hermitian operators with known eigenvalues. Moreover, the main result can be extended to cover the case of the sum of two normal matrices.

(This is a joint work with Chi-Kwong Li.)