

RECENT DEVELOPMENTS IN OPERATOR INEQUALITIES

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Whenever we see a result concerning real or complex numbers (commutative case), a nice question is to ask ourselves whether it is true for bounded linear operators on a Hilbert space or their norms (noncommutative case).

In this talk we investigate some similarities and differences between numbers and operators. We focus on inequalities and describe some methods which allow to extend a numerical inequality to an operator inequality. For instance, we examine some inequalities involving unitary invariant norms, operator mean inequalities, Cauchy–Schwartz type inequalities as well as inequalities concerning convex and monotone operator functions.

References

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