

# Kolloquium

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*On joint numerical radius*



Let  $T_1, \dots, T_n$  be bounded linear operators on a complex Hilbert space  $H$ . We study the question whether it is possible to find a unit vector  $x \in H$  such that  $|\langle T_j x, x \rangle|$  is large for all  $j$ . Thus we are looking for a generalization of a well-known fact for  $n = 1$  that the numerical radius  $w(T)$  of a single operator  $T$  satisfies  $w(T) \geq \|T\|/2$ .

Do·23·Apr  
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