



MAFIA - the seminar you can't refuse

## **Carl's inequality: Optimality and Lower Bounds in Approximation Theory**

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ČVUT v Praze

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13:15–14:15

in T115/C

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Trojanova 13, 12000 Praha

**Abstract:** We present the Carl's inequality connecting entropy numbers of a linear operator between two Banach spaces with its approximation, Gelfand and Kolmogorov numbers. We then present its use in the optimality of algorithms as well as its extension to quasi-Banach spaces. As an application, we re-prove some results from the area of Compressed Sensing as well as low-rank matrix recovery.