

## **Matrix length**

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(Joint work with Olga Markova)

We investigate the length function on associative algebras and its algebraic properties. In particular, we study the length of direct sums, homomorphic images and subalgebras and the behavior of the length under the adjunction of unity and the field extensions. Also we estimate the length of local algebras via the nilpotency index of its Jacobson radical. Length of commutative matrix algebras is investigated.