

INSTITUTUL DE MATEMATICĂ “SIMION STOILOW” AL ACADEMIEI ROMÂNE  
**Conferința lunară**

# *Some Geometric Aspects of Quaternions and Octonions*

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**Abstract:** Quaternions and octonions were discovered around 1850 by Hamilton and Cayley/Graves respectively. They gather several geometrical properties and in particular gave rise to multiplicative quadratic forms and Lie group actions on spheres of dimension 3 and 7 respectively. We shall discuss firstly this classical viewpoint linked with physical sciences and will move forward to the notion of family (or bundle) of quaternion (resp. octonions) in differential and algebraic geometry.