



Universidade do Minho  
Escola de Ciências

# New Trends in Quaternions and Octonions

2016 December 16-17

## SCOPE

The *Second Workshop New Trends in Quaternions and Octonions* aims to present recent advances in the research on quaternions and octonions gathering scientists working in pure as well as applied mathematics, scientific computation and applications in physics, engineering and other applied sciences.

This workshop represents an opportunity to discuss recent developments in the field of quaternions and octonions, may they be theoretical, computational or real-world applications.

## INVITED SPEAKERS

- **Lidia Aceto** :: University of Pisa, Italy  
Matrix representation of algebra-valued Appell polynomials
- **João Morais** :: ITAM—Mexico Autonomous Institute of Technology, Mexico  
Prolate spheroidal wave functions associated with the quaternionic Fourier transform
- **Ricardo Severino** :: University of Minho, Portugal  
Iteration of quadratic maps on coquaternions
- **Swanild Bernstein** :: Technische Universität Bergakademie Freiberg, Germany  
Fractional Riesz-Hilbert transforms and fractional monogenic signals

## ORGANIZATION

Helmuth Malonek & Isabel Cação :: University of Aveiro

José Vitória :: University of Coimbra

Fernando Miranda & Maria Irene Falcão :: University of Minho



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**FCT**

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## URL

<http://w3.math.uminho.pt/NTQO/>