



# 5<sup>th</sup> Symposium on "Hypercompositional Algebra-new Developments and Applications"

## 1<sup>st</sup> day: Monday, 2.6.2025, chair assoc.prof. Irina Cristea

9:45 Opening the event
10:00 Christos Massouros and Gerasimos Massouros "On the class of Transposition Hypergroups"
10:30 Charalampos Tsitouras "AI Tools and the Exploration of Hypercompositional Structures in Algebra"
11:00 Spyridon Vossos, Elia Vossos "Can Hypercompositional Algebra Contribute to the Resolution of the Unsolved Problems of Modern Physics?"

### 11:30-14:00 Break

14:00 Madeleine Al-Tahan "Anti-ideal Theory in Algebraic Structures and Their Fuzzifications"
14:30 Burcu Nişancı Türkmen "Supplementing Krasner Hypermodules"
15:00 Ergül Türkmen "On Normal Projective (Injective) Krasner Hypermodules "
15:30 End of first day sessions

2<sup>nd</sup> day: Tuesday, 3.6.2025, chair assist.prof. Hashem Bordbar

10:00 Antonios Kalampakas "Fuzzy Graph Hyperoperations" 10:30 Bianca Bercea-Straton "Construction of Finite Fields and Hyperfields" 11:00 Anton Nuculović "Some Classes of Hypernear-rings"

#### 11:30-14:00 Break

14:00 Temitope Gbolahan Jaiyeola "Analysis of Weak Associativity in Some Algebraic Hypercompositional Structures that Represent Dismutation Reactions" 14:30 Oyeyemi Oluwaseyi Oyebola "On the Study of Extra Polyloop-3 and its Algebraic Properties"

15:00 Hugo Luiz Mariano "Linear (Multi) Algebra I: Linear Systems, Matrices and Vector Spaces over Superfields"

15:30 End of the second day sessions

**3<sup>rd</sup> day: Wednesday, 4.6.2025**, chair prof. Charalampos Tsitouras

10:00 Andromeda Sonea-Pătrașcu "*Fuzzy Aspects in Biological Inheritance*" 10:30 Enrico Talotti "Encoding Hypercompositional Algebra through binary strings" 11:00 Hanna Stojałowska "*On the Generation of Finite Real Hyperfields with Cyclic Positive Cones*"

**11:30 End of the third day sessions** 

## 4<sup>th</sup> day: Thursday, 5.6.2025, chair prof. Christos Massouros

10:00 Alessandro Linzi "On the Notion of Algebraically Closed Hyperfields" 10:30 Hashem Bordbar TBA

#### 11:00-14:30 Break

14:30 Marcelo Esteban Coniglio "On Morgado and Sette's Implicative Hyperlattices as Models of da Costa Logic  $C_{\omega}$ " 15:00 Kaique Roberto "Hyper Swap Structures" 15:30 Guilherme Toledo "Weakly Free Multialgebras" **16:00 End of the fourth day sessions** 

5<sup>th</sup> day: Friday, 6.6.2025, chair prof. Christos Massouros

10:00 Violeta Fotea "*The Fuzzy Grade of a Certain Class of Hypergroups*"10:30 Irina Cristea "*Arithmetic functions on complete hypergroups*"11:00 Round table and closing remarks