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Centro de Investigação em Matemática e Aplicações
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Seminário/Seminar

30/09/2025, Sala 138 CLAV , 16h00

On certain total orders of the naturals - shuffles

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Abstract: We study certain rearrangements of the natural numbers, here called shuffles. Motivated by orderings arising in varied contexts, namely dynamical systems, we focus on decomposable shuffles and provide their classification. We show how shuffles determine total orders on \mathbb{N} . Under suitable restrictions, we define a composition operation that endows certain classes of shuffles with group-like properties. This framework connects infinite permutations, ordinal arithmetic, and order theory, and opens perspectives for further applications.

Joint work with João Dias, Bruno Dinis, CIMA, DMat, ECT, Universidade de Évora.

Acknowledgements: This talk has been partially funded by national funds through the FCT – Fundação para a Ciência e a Tecnologia, I.P., under the scope of the project UIDB/04674/2020 (<https://doi.org/10.54499/UIDB/04674/2020>), Centro de Investigação em Matemática e Aplicações (CIMA).



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