



**LMAP**  
LABORATORY OF  
MATHEMATICS AND  
APPLIED PHYSICS  
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ENS-BOUSAADA

Ministry of Higher Education and Scientific Research  
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Department of Science Physics and Laboratory  
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## CERTIFICATE OF PARTICIPATION

The Organizing Committee of the Second National Conference on Physics and its Applications  
(20 Novembre 2025) is pleased to award this certificate to :

**HELLALI LALLOUANI**

in recognition of his active participation in the conference with an Oral presentation  
entitled: “ Modeling and control of a wind turbine using type-1 fuzzy logic “

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