



LMAP

LABORATORY OF
MATHEMATICS AND
APPLIED PHYSICS
المدرسة العليا للأستاذة - بوسنادة
ENS-BOUSAADA

Ministry of Higher Education and Scientific Research
Higher Normal School of Bou Saada
Department of Science Physics and Laboratory
of Mathematics and Applied Physics



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 :

Abir BETKA

in recognition of active participation in the conference with an poster presentation en-titled: " Intelligent Optimization Technique for Photovoltaic Model Parameterization "

Co-author: Samia NOUREDDINE, Naima RAHOUA, Hani BENGUESMIA, AbidaTOUMI

