

People's Democratic Republic of Algeria
The Minister of Higher Education and Scientific Research
Saad Dahlab University - Blida1
Institute of Aeronautics and Space Studies



A dissertation submitted in partial fulfilment of the requirements for the degree
of

Doctor of Philosophy (PhD) in CNS/ATM

Presented by

MORDI Zeyneb

Titled

Contribution to the development of miniature multiband antennas

Defended before a jury composed of:

- | | | | |
|------------------------|----------------------|------------|---------------|
| • Messaoud BENSEBTI | Professor | U. Blida-1 | Chair |
| • Zahir HAMOUDA | Professor | ESTA | Supervisor |
| • Mohand LAGHA | Professor | U. Blida-1 | Co-supervisor |
| • Fatima Zohra CHELALI | Professor | USTHB | Examiner |
| • Ali MANSOUL | Director of Research | CDTA | Examiner |

The defense will take place on Monday, May 11, 2026, at 16:00 p.m. in the conference room of the Institute of Aeronautics and Space Studies.