



UNIVERSITÀ
DI TRENTO

Dipartimento di
Fisica



PhD Program in Space Science and Technology - SST

Multibeam Antennas: Architectures, Trends & Challenges

Specific Seminar – Curriculum 6

June 23rd, 2023, 3 p.m.

Speaker:

Giovanni Toso and Piero Angeletti - Radio Frequency Payloads and Technology Division, European Space Research and Technology Centre (Estec) of the European Space Agency (ESA)

Abstract:

The objective of this seminar consists in presenting the state of the art and the on-going developments in Multi-Beam Antennas (MBAs). MBAs find application in several fields including communications, remote sensing (e.g. radars, radiometers, etc.), electronic surveillance and defence systems, science (e.g. multibeam radio telescopes), RF navigation systems, etc. Multibeam antennas are assuming a crucial role in emerging MIMO, 5G and 6G communications.

The seminar will cover:

- Multibeam Antennas Main Architectures
 - Direct Radiating Arrays
 - Reflector-based architectures
 - Lens-based architectures
- Current Design and Technological Challenges

Online attendance:

On-line platform: Microsoft TEAMS

Link: [https://teams.microsoft.com/l/meetup-](https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZWFjNzhiM2EtYjlxOS00OGNlLWI4NmQtYzZhZWQ1NmMyYjU2%40thread.v2/0?context=%7b%22Tid%22%3a%2234c64e9f-d27f-4edd-a1f0-1397f0c84f94%22%2c%22Oid%22%3a%22256139b0-ba97-4ab0-a419-8b0c6c7562ef%22%7d)

[join/19%3ameeting_ZWFjNzhiM2EtYjlxOS00OGNlLWI4NmQtYzZhZWQ1NmMyYjU2%40thread.v2/0?context=%7b%22Tid%22%3a%2234c64e9f-d27f-4edd-a1f0-1397f0c84f94%22%2c%22Oid%22%3a%22256139b0-ba97-4ab0-a419-8b0c6c7562ef%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZWFjNzhiM2EtYjlxOS00OGNlLWI4NmQtYzZhZWQ1NmMyYjU2%40thread.v2/0?context=%7b%22Tid%22%3a%2234c64e9f-d27f-4edd-a1f0-1397f0c84f94%22%2c%22Oid%22%3a%22256139b0-ba97-4ab0-a419-8b0c6c7562ef%22%7d)

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