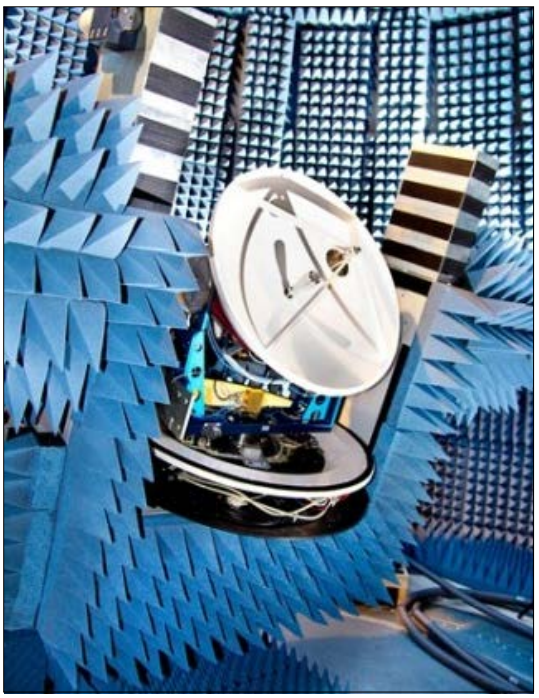
FORTE
(Facility for over-the-air research and testing) by Fraunhofer IIS

- Far field test bed for satellite communication with mechanical movement and channel emulators
- Over-the-air test bed for mobile communication
- Wave field synthesis for electrically small test objects for terrestrial and satellite based radio communication

Detailed information:

https://www.iis.fraunhofer.de/en/profil/standorte/forte.html



FORTE
(Facility for Over-the-Air Research and Testing) at Fraunhofer IIS

Test facility hosting the two research platforms "SatCom" and "MIMO-OTA"

"Satcom"
- Testing of SatCom on the move (SOTM) transceivers for:
  - European Space Agency (ESA) type approvals
  - Global VSAT Forum type approvals
  - Eutelsat type approvals
  - Industrial projects
- Components
  - Motion Emulator, Inclination: ±45°
    Speed: 300°/s Acceleration: 1000°/s²
  - 50 m antenna tower to mount satellites
    for elevations of 16° or 24°

"MIMO-OTA"
- Testing of MIMO transceivers up to 6 GHz targeting:
  - Mobile broadband (incl. LTE Testbed, 5G)
  - GNSS
  - Industrial communications
  - V2V und V2I
- Approaches
  - Wavefield synthesis for smaller test objects
  - Wireless cable for bigger test objects (e.g. vehicles)
- Technical parameters
  - Frequency range: 70 MHz – 6 GHz
  - Bandwidth : 80 MHz
  - RF Output: +10 dBm
  - Connectivity: 12 Inputs x 32 Outputs =384 Channels

Further information
https://www.iis.fraunhofer.de/en/profil/standorte/forte.html