

Lecture Announcement

RADAR Systems Design

Prof. Gil Yudilevitch

RADAR systems are essential components in aerospace vehicles and supporting ground sites, with a wide area of civil and military applications. The continued decrease of size, weight and power requirements of RADAR systems and of implemented computational power have given a rise to the proliferation into new application fields. This lecture is designed to give the aspiring aerospace engineers the knowledge to understand the requirements dictated by different RADAR systems and analyze them in the context of their desired applications.



[1]



Lecture Content:

1. Introduction to RADAR systems
2. RADAR equation
3. Waveforms
4. Pulse Compression
5. Detection and Tracking RADAR
6. Wave propagation
7. RADAR Cross Section (RCS)
8. Target Detection
9. Angle Measurement techniques
10. RADAR antennas and AESA

Time: Thursday, 14:00 – 16:30

Location: MW3618

➡ First Lecture: 20th of April 2023

[1]: Bin im Garten derivative work: MagentaGreen, ILA Berlin 2012 PD 193-Detail-2, CC BY-SA 3.0

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Room information: <https://www.fsd.ed.tum.de/team/facilities-floor-plan/>

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