



Bessel Beam Generation via Leaky-Wave Antenna

Master Thesis
or
Research Thesis

Theory and Motivation:

- Planar leaky-wave antennas can be employed to generate Bessel (=non-diffracting) as well as radially polarized beams
- For a novel bio-sensing setup, the inclusion of such beams is promising

Application:

- Non-invasive bio-sensing
- Novel scattering measurements

Tasks:

- Design and optimization of leaky-wave structures
- Measurement of prototypes

Information:

- Requires some knowledge of high-frequency circuit design and concepts
- Basic knowledge of RF simulations with CST would be ideal
- Thesis can be written in either German or English
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