

Master's thesis proposal

Investigation and optimization of ultra-wideband bias tees up to 110 GHz

Fraunhofer IAF is one of the world's leading research institutions in the field of III-V semiconductors and synthetic diamond developing technologies for use in communication, energy, mobility, industry and medicine. In our microelectronics department we are offering the following master's thesis:

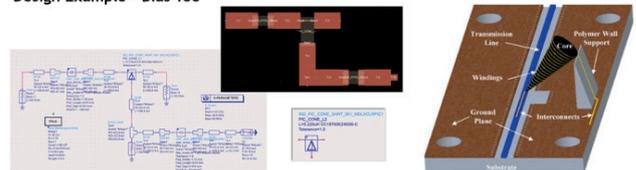
Tasks to complete:

- Simulation, design and optimization of micro-electronic inductors and SMD capacitors.
- Circuit simulation and computer-aided design of ultra-wide-band bias tees using modern RF development tools (e.g. Keysight ADS, CST Studio Suite, Modelithics) for use in novel THz radio links.
- Printed circuit board design, manufacturing and characterization of the bias tees.

What we offer:

A thesis at Fraunhofer IAF allows you to apply the knowledge you have acquired during your studies to specific research projects. With us, you can work scientifically and gain project experience at the same time. We offer modern laboratory equipment, supervision by experienced scientists and a variety of opportunities for further education.

Design Example - Bias Tee



Send your application to:

Dr. Jutta Kühn
Phone +49 761 5159-842
jutta.kuehn@iaf.fraunhofer.de

Fraunhofer Institute for Applied Solid State Physics IAF
Tullastrasse 72
79108 Freiburg