



Satellite-5G: Implementation of a 4G/5G Base Station

Bachelor/Master/Project

Task Description

- The open-source LTE software radio suite (<https://www.srslte.com/>) provides an 4G/5G implementation of cellular network components: this allows to build custom 4G/5G base stations as well as cell-phones using just some of-the-shelf software-defined radios (e.g. USRP from ettus.com) and PCs
- In this project, **we want to implement our own 4G/5G base station**, to which commercial cell-phones can connect and exchange data with; dependent on the type of project (Bachelor, Master, Project) we then further study the use for remote, satellite-based deployment of such base stations

Preliminary Knowledge

- *LINUX, C/C++*

Contact

Tim Horst (tim.horst@uni-wuerzburg.de)

Markus Gardill (markus.gardill@uni-wuerzburg.de)

