

## **Trends on the modern MIMO radio channel modeling and testing**

**Abstract:** In this presentation we review the recent developments related to radio channel modelling. The presentation is aimed to 4G system developers, who wish to have test systems that can handle various MIMO technologies. The presentation starts from the very basic concepts, development from time and frequency into space dimension what is needed for advanced MIMO technologies. We cover SCM, SCME and WINNER radio channel models. In the latter part of the presentation we discuss the importance of the model in terms of the performance figures as well as we also discuss what makes radio channel model to be good model. The presentation is concluded with one practical example of beamforming.