## Characteristic Mode based antenna design –

## a straight forward approach to small form factor antenna integration

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When integrating antennas into the chassis of the application the performance is dominated by the integration impairments. Often, excitation of the chassis can be utilized to achieve both, good antenna performance and a small form factor.

The Theory of Characteristic Modes (TCM) enables profound understanding on how such structures work and it can be utilizes as a valuable tool for straight forward design.

The talk introduces to the TCM and shows how it can be used to design antennas for small mobile terminals, automotive applications.

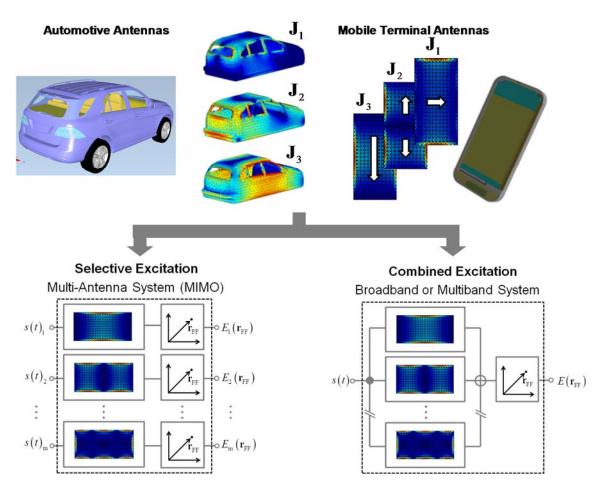


Fig.: Utilizing TCM for broadband antennas and multi-antenna systems.