

**CHAIR OF  
ELECTROMAGNETIC  
COMPATIBILITY**



ts, bachelor and master theses. Of course it is possible to discuss with

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### ording to Schelkunoff #MS

alculate the shielding efficiency of a planar metallic wall is a standard  
fect of boxes or enclosures. The calculation is done in the frequency  
less, measurement methods and characteristics to assess the transie  
he literature.

shielding efficiency  
y the shielding efficiency  
he time domain

alysis+of+the+Transient+Shielding+Efficiency+According+to+Schelkunoff+\_MS-p-

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### x #PRAC

of electromagnetic compatibility like galvanic, capacitive and inductiv  
bonding, filtering and shielding can be more easily understood if the  
n units or "demo boxes" have been popular for several decades

its

/IP+Development+and+Construction+of+an+EMC+Demo+Box+\_PRAC-p-508.htm

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### er Test in a Reverberation Chamber #MEAS #MSC

ommonly used to test the immunity against high intensity radiated  
gh quality factor and low losses. In the steady state, the input power  
ver loss in the empty chamber and the chamber loaded with the devi  
st can be determined.

rement+of+the+Coupled+Power+to+a+Device+Under+Test+in+a+Reverberation+

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### two Helix Antennas in a Reverberation Chamber #MEAS #MSC

bers can be described statistically. This description covers the  
he spatial correlation between nearby field points. Usually, the field a  
inary parts of the complex phasors of the field components are  
From this follows that the field is statistically homogenous, isotropic,  
, also the maximum values of the field components and therefore the  
ined.

rement+of+the+Scattering+Parameters+Between+two+Helix+Antennas+in+a+Rev

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### early Loaded Transmission Networks #MS #MSC

paths of external electromagnetic fields into connected devices and  
esses occur that can be regarded as transmission line networks.  
at least in the far field region.

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### ie Plane Wave Integral Representation #MSC #MS

id complex shaped resonators (e.g. car bodies, aircraft fuselages, ...) h a description is of little value, as a small change in frequency, in th is may lead to a completely different field pattern. Therefore, a so be experimentally reproduced in reverberation chambers. If a has to be described statistically. For this, several methods exist, as *presentation*.

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I incandescent lamps LED lamps are increasingly used for lighting. age rectifiers, which are in turn the cause of undesired harmonics.

/Power+Quality+of+LED+lamps+\_MEAS+\_PQ-p-224.html)

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### quality analysis #PRAC #PQ

quipment, which considerably influences the power quality in ases the devices cause unwanted operating states in the network. W n be recorded and evaluated. ct recording, digitalization and storage but also an automated analys ent results.

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Chairholder ▶

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Secretariat ▶

# L<sup>A</sup>T<sub>E</sub>X

## Study

- ▶ Topics for Theses
- ▶ Guidelines and Templates
- ▶ Topics for Nontechnical Projects