

Can Static Electricity be Measured?

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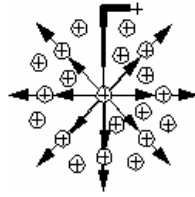
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Ever since my first EOS/ESD Symposium in Las Vegas in 1983 I have wondered why intelligent people presenting interesting papers describing cleverly executed experiments with useful results keep insisting on using non-existing concepts and warped units when presenting their findings.

Some of my (maybe now former) friends may already have guessed that I am hinting at such things as *the voltage of a plastic box*.

There is no such thing.

Or a surface resistivity measured in *ohms per square*.

There is no such thing. (The one and only unit is ohm (Ω)).

This, and a lot more, is discussed in this paper.

Is this then just a hair-splitting exercise ?

I hope not.

Rather, this is an attempt to put some things together in a more comprehensive context to make the concepts and their interrelations more digestible.

I do well know that it may all end up a Don Quijote crusade against windmills.

Because these “windmills” are so comfortable and familiar.

So who cares if the flour is polluted by unhealthy additives.

I hope you do.

Lyngby, September 1998

Niels Jonassen

The artwork is done by my friend O. Broo Sørensen.

Most of the figures are from my book *Electrostatics*, (Chapman & Hall, 1997)