

Abstract Submitted
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Surface Charge in Electrostatics and Circuits BRUCE SHERWOOD, NCSU — In electrostatics and in circuits, charge buildups on the surfaces of conductors contribute to the electric field inside and outside of the conductors. A relaxation method based on field was used to compute the surface charge distributions in 3D for a number of interesting configurations, using Python with the Numpy vectorization library. These distributions and the associated fields can be explored interactively with a GlowScript/VPython program at glowscript.org/#/user/Bruce_Sherwood/folder/MI4e/program/18-SurfaceCharge. The talk will highlight some of the interesting features of these charge distributions.

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