

The scalar magnetic potential in meg.

George Dassios

Applied Mathematics and Theoretical Physics, University of Cambridge

G.Dassios@damtp.cam.ac.uk

Abstract

We present an integral representation of the scalar magnetic potential in terms of the boundary values of the corresponding electric potential for any conductor. Then, we restrict the geometry of the conductor to the ellipsoidal one and we present an analytic construction of the magnetic potential in the form of an expansion in exterior ellipsoidal harmonics.