Analysis of TE Scattering from Dielectric Cylinders Using a Multifilament Magnetic Current Model

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Abstract—**A moment solution is presented for the problem of transverse electric TE scattering from homogeneous dielectric cylinders. The moment solution uses fictitious filamentary magnetic currents to simulate both the field scattered by the cylinder and the field inside the cylinder and in turn point-matches the continuity conditions for the tangential components of the electric and magnetic fields across the cylinder surface.**