1030-35-351Aurelia Minut* (minut@usna.edu), Department of Mathematics C, 572C Holloway Road,
Chauvenet Hall, Annapolis, MD 21402. Maxwell's equations in nonlinear media.

In this talk, we consider Maxwell's equations in a domain that is composed of two different media. We present estimates for the solutions of Maxwell's Equations with source term. Such an estimate is employed to solve a nonlinear optics problem. This is joint work with G. Bao and Z. Zhou. (Received August 06, 2007)