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**Asymptotic Behavior of Solution and Semi-Discrete Scheme for One
Nonlinear Integro-Differential Model**

One nonlinear partial integro-differential model, which is obtained as a result of reduction of well-known Maxwell's system, is considered. The asymptotic behavior of solution of initial-boundary value problem with two different kind of boundary condition is studied. The semi-discrete difference scheme is constructed and theorem of convergence is proven. In both cases the wider classes of nonlinearity, than already has been investigated are discussed.