

Generalized model solutions for electromagnetic waves in overdense plasmas with electron collisions

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Basing our study on the seminal paper of White and Chen on overdense plasmas we give in all physically relevant cases the model solutions for the electric and magnetic field. This study is done considering any plasma where the density of electrons, given, depends only on one variable x and where the applied magnetic field is constant. We will exhibit the general solutions and their amplification factors for the cut-off points as well as for the turning points.