

**THE INFLUENCE OF THE MAGNETIC FIELD ON THE ELECTRIC  
PROPERTIES IN WARM AND HIGH DENSE PLASMA**

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We presented the theoretical formulas of longitudinal and transverse permittivities, as well as the dispersion law in the case of high temperature and highly extremely dense plasma. On the other hand, we found the electrical permittivity in a relativistic classical plasma. So we have used the distribution of Maxwell-Juttner that is more accurate for this kind of plasma. We obtained the corresponding dispersion curves. We can say that the imaginary part of our result is in good agreement with existing theoretical results.