



Contribution ID: 28

Type: Poster

## The Depth of Penetration of Slow Transverse Waves in the Plasma Interacting with Laser Beat Waves

*Monday 7 September 2015 16:30 (2 hours)*

The self-consistent kinetic equation describing the state of collisionless plasma with an initial distribution of the Maxwell interacting with laser beat waves (LBW) is solved. For study the spectra of transverse electromagnetic waves are received the dispersion equation and expression for the dielectric permittivity. Analysis of the dispersion equation for the slow transverse waves was conducted. It is shown that the skin effect is manifested in a lower frequency region than it was previously accepted. When interacting with the plasma LBW skin effect is suppressed and passes from anomalous dispersion to normal dispersion. Wherein slow transverse waves is amplified.

**Author:** SHAMAMIAN, Anahit (A.Alikhanyan National Laboratory (Yerevan Physics Institute))

**Presenter:** SHAMAMIAN, Anahit (A.Alikhanyan National Laboratory (Yerevan Physics Institute))

**Session Classification:** Poster Section

**Track Classification:** 1. General Aspects of Physical Phenomena and Processes Associated with Electromagnetic Radiation