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DE BROGLIE WAVE AND LONGITUDINAL DENSITY EFFECT

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Abstract
The de Broglie wave characterizing a relativistic particle moving in a medium and X-ray radiation emitted in the medium by the relativistic charged particle are considered. Phase and group velocities of both, de Broglie and electromagnetic waves are compared. The criterion for the appearance of the Ter-Mikaelian longitudinal density effect (dielectric suppression effect) is formulated in terms of phase and group velocities.
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