

REFRACTION AND REFLECTION OF SPIN WAVES IN ANTIFERROMAGNETIC MEDIA

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S u m m a r y

In the formalism of spin density, we have calculated the refraction index of bulk spin waves, which propagate in the antiferromagnetic medium with an inhomogeneous distribution of the parameters of exchange interaction and anisotropy in the presence of an external permanent magnetic field. The dependence of the reflection coefficient of spin waves on a boundary of two homogeneous antiferromagnetic media with different constants of the exchange interaction, anisotropy, and saturation magnetization on the frequency and the field intensity is investigated taking into account a δ -like exchange on the interface.