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**Linear analysis of obliquely propagating longitudinal waves in partially spin polarized degenerate magnetized plasma** ZAFAR IQBAL, GHULAM MURTAZA, Department of Physics G C University, Lahore, Pakistan — Linear analysis of obliquely propagating longitudinal waves in partially spin polarized degenerate magnetized plasma Linear analysis of low frequency obliquely propagating electrostatic waves in a partially spin polarized degenerate magnetized plasma is presented. Using Fourier analysis, a general linear dispersion relation is derived for low frequency electrostatic lower hybrid (LH) wave, ion acoustic (IA) wave and ion cyclotron (IC) wave in the presence of electron spin polarization. It is found that the electron spin polarization gives birth to a new spin- dependent wave (spin electron acoustic wave) in the spectrum of these waves. Further, the electron spin polarization also causes drastic shifts in the frequency spectrum of these waves. These effects would have a strong bearing on wave phenomena in degenerate astrophysi

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