RXTE Studies of Cyclotron Lines in Accreting Pulsars

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Observations of accreting X-ray pulsars with the RXTE have revealed new cyclotron resonance scattering features (CRSFs) in Cen X-3, 4U 1626-67, and 4U 0115+63. In addition, the known CRSFs in Her X-1, Vela X-1, 4U 1538-52, and 4U 1907+09 have been studied. We report the observed line properties including energies, widths, depths, and behavior with pulse phase. With seven objects observed in detail, some class generalizations, for example line width versus energy, might be reasonably secure. Furthermore, models of the polar cap emitting region can now be tested against observed CRSFs under a variety of conditions.