

Multiple Cyclotron Lines in the Spectrum of 4U 0115+63

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We have discovered a third harmonic cyclotron resonance scattering feature (CRSF) in *Rossi X-ray Timing Explorer (RXTE)* observations of the recent outburst of 4U 0115+63. This is the first time that more than two harmonics have been observed in a single accreting X-ray pulsar. The CRSFs are apparently not harmonically spaced; however, this may be due to fitting the complex shape of the fundamental with a simple absorption profile. We report on spectral changes through the pulse phase, including the possible presence of a 4th cyclotron line, as well as the detection of a strong 2 mHz QPO seen at periastron passage.