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Looking for Periodicity in X-Ray Emission Data ANDRES CUEL-LAR, STEPHANIE COHEN, MATTHEW BENACQUISTA, University of Texas at Brownsville — X-Ray Binaries are systems in which matter falling from one component of the system to the other releases energy in the form of X-Rays. We created an algorithm which uses Pearson's Chi-Squared test to look for periodicity in X-Ray emission data from NASA's Swift Burst Alert Telescope (BAT) 58-Month Hard X-Ray Survey. We use the known High Mass X-Ray Binary J1647.9-4511B to verify the accuracy of our program testing over a range of periods, bins and energy bands to verify the true period. Results are discussed.

> Andres Cuellar University of Texas at Brownsville

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