

Abstract Submitted
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Search for R-modes from known Pulsar.¹ BINOD RAJBHANDARI, BENJAMIN OWEN, Texas Tech University — gravitational waves are weak in signal but it can beat the spin down limits if observed for a longer time span. R-modes are the current quadruple oscillation of fluid in neutron star, which emits gravitational waves in $4/3$ times the spin frequency in Newtonian case. We present here the first search of R-mode gravitational waves from known pulsar from a LIGO O1 & O2 run using the F-statistic method. We didn't find gravitational waves but set up a 95% upper limit on amplitude strain.

¹Search for R-modes from known Pulsar

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