

PID:PT2022_0009

Abstract:

Gravitation is one of the four fundamental forces of nature, and the least understood one -- it has not yet been included within a unified quantum-gravity theory with the other forces. Pulsar binaries are some of the best laboratories of gravitation that offer stringent tests in the strong field regions. We propose to observe selected pulsar binaries using FAST and combine the high-sensitivity FAST observations with data we already collected from other telescopes to enable new tests on the theories of gravitation.