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Strong Gravitational Effects on Pulsar Signals Emanating from Close Compact Binary Systems

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The advent of the MeerKAT and SKA radio telescope projects will allow for vastly improved precision in the measurement of pulsar radio frequency emissions. Thus, the propagation of a pulsar's conical radio beam through the strong gravitational field region in the vicinity of a compact object, i.e. black-hole or another neutron star, will probe the metric of spacetime in the high-field regime. This talk outlines the theoretical and associated numerical predictions of General Relativistic effects, such as the Lense-Thirring effect, on such a pulsar signal.

Level (Hons, MSc,
 PhD, other)?

MSc

Consider for a student
 award (Yes / No)?

Yes

Would you like to
 submit a short paper
 for the Conference
 Proceedings (Yes / No)?

Yes

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