## Abstract Submitted for the APR16 Meeting of The American Physical Society

An analysis of explicit solutions to force-free electrodynamics in a Kerr background GOVIND MENON, Troy University — The talk will focus on two previously obtained exact solutions to force-free electrodynamics in a Kerr background. We will explicitly construct the kernel of the degenerate electromagnetic fields and explore the possibility of constructing combinations of solutions to the nonlinear equations. The goal of this analysis is to obtain non-trivial streaming surfaces of the theory that are astrophysically relevant.

Govind Menon Troy University

Date submitted: 07 Jan 2016 Electronic form version 1.4