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Title: Frame-dragging: meaning, myths, and misconceptions

Abstract: Originally introduced in connection with general relativistic Coriolis forces, the term frame-dragging is associated today with a plethora of effects related to the off-diagonal element of the metric tensor. It is also frequently the subject of misconceptions leading to incorrect predictions, even of nonexistent effects. In this talk we will show that there are three different levels of frame-dragging corresponding to three distinct gravitomagnetic objects: gravitomagnetic potential, field, and tidal tensor, whose effects are independent, and sometimes opposing. It is seen that, from the two analogies commonly employed, the analogy with magnetism holds strong where it applies, whereas the fluid-dragging analogy (albeit of some use, qualitatively, in the first level) is, in general, misleading. Common misconceptions (such as viscous-type "body-dragging") are debunked. Applications considered include rotating cylinders (Lewis-Weyl metrics), Kerr, Kerr-Newman and Kerr-dS spacetimes, black holes surrounded by disks/rings, and binary systems.