Physics notebook volume 16: 06/##/09 – 11/05/09

Summary and context

This was started right after the move to Memphis. I was thinking about local translations, and this line of thought was inspired by a discussion between Sergio and Lou regarding what happens to the spin of a fundamental particle that falls into a black hole. This discussion between Lou and Sergio led to Sergio becoming interested in how fundamental spin is represented in general relativity, which in turn led to a consideration of the fairly substantial literature on gauge gravity and the notion that local translations are fundamental to gravitational interactions.

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