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The Maxwell-Bopp-Lande-Thomas-Podolsky-Einstein system for a static point source

Monday, 5 July 2021 19:10 (20 minutes)

In this talk, we discuss the existence of a static, spherically symmetric spacetime that is the solution of the Einstein field equations coupled with an electric field obeying the equations of electromagnetism of Maxwell-Bopp-Lande-Thomas-Podolsky for a static point charge. Contrary to what happens with the Reissner-Nordstrom spacetime, it is shown that the electric field energy is finite, just as for this same theory on a background flat spacetime.

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