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Title: Faraday’s law via a variational principle, torsion and magnetic monopoles

Even though Faraday's Law is a dynamical law that describes how changing $\bf{E}$ and $\bf {B}$ fields influence each other, by introducing a vector potential $A_{\mu}$ according to $F_{\mu\nu}=\partial_{\mu}A_{\nu}-\partial_{\nu}A_{\mu}$ Faraday's Law is satisfied kinematically, with the relation $(-g)^{-1/2}\epsilon^{\mu\nu\sigma\tau}\nabla_{\nu}F_{\sigma\tau}=0$ holding on every path in a variational procedure or path integral. In a space with torsion $Q_{\alpha\beta\gamma}$ the axial vector $S^{\mu}=(-g)^{1/2}\epsilon^{\mu\alpha\beta\gamma}Q_{\alpha\beta\gamma}$ serves as a chiral analog of $A_{\mu}$, and via variation with respect to $S_{\mu}$ one can derive Faraday's Law dynamically as a stationarity condition. With $S_{\mu}$ serving as an axial potential one is able to introduce magnetic monopoles without $S_{\mu}$ needing to be singular or have a non-trivial topology.