I ain't afraid of no ghost

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Claim: Virtual particles should be given a uniform interpretation (*contra* Weingard 1988).

Context: Generally thought that "virtual particle" talk is really about Feynman diagrams, which are really about equations (not physical processes).
Exception: virtual "ghost" particles aren't even about equations.

Convention dependence

We can make the last diagram zero but not the first three.
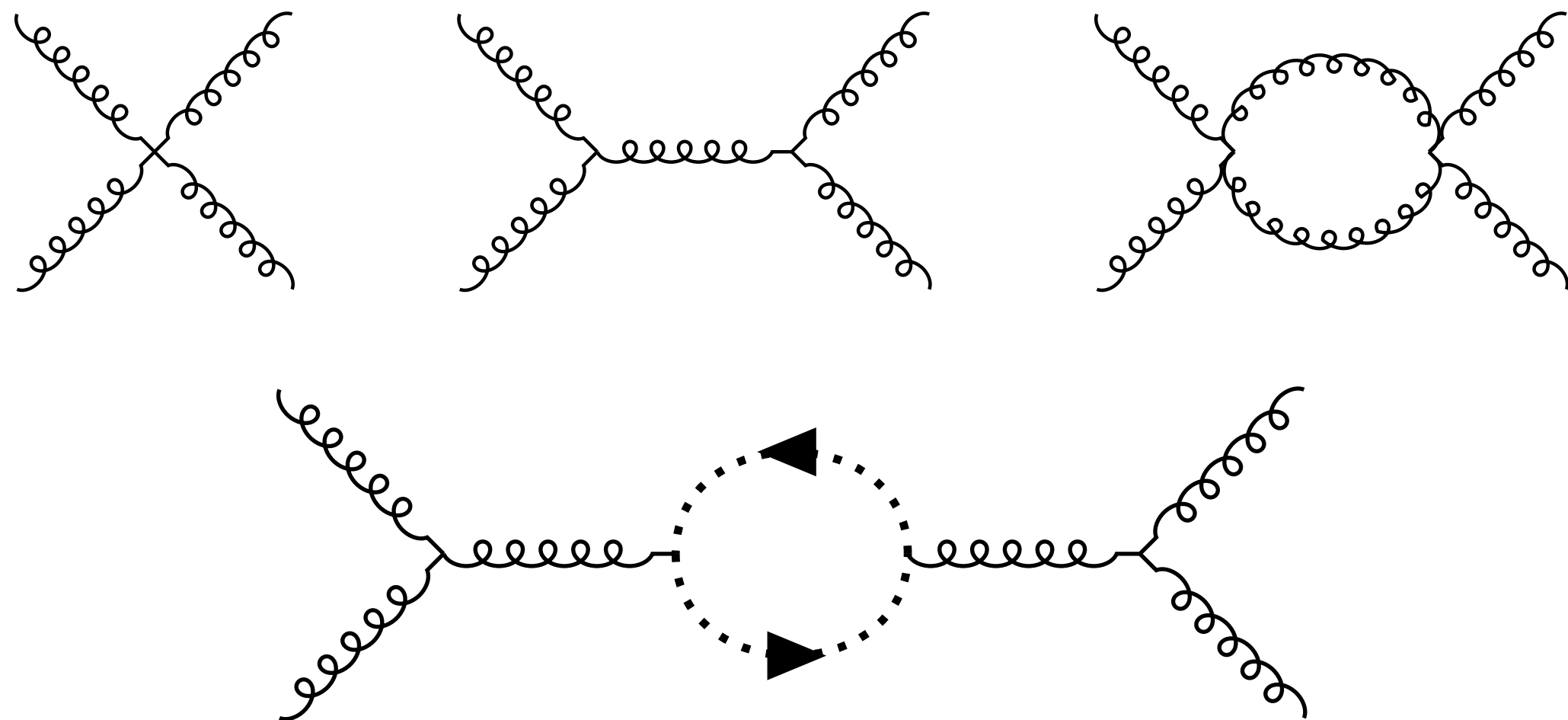
Electromagnetic analogy

Can't always set potential A to zero, even when field F is zero (Aharonov-Bohm), so A is "part of the equation"

Principle: X is "part of the equation" iff it can't be "transformed away"

But: Ghosts *can't* be transformed away, and this is why the proton and electron have exactly opposite charges

Conclusion: The usual arguments mean we should interpret ghosts just like other virtual particles