

## IR divergences in massless QED

We study the cancellation of both collinear and infrared divergences in a process where a massless electron scattered off of a static point charge. We found that the collinear divergences have been eliminated by the application of the well known KLN theorem. The application of the KLN theorem requires adding the absorption of a photon which spoils the cancellation of the IR divergences. We check the validity of adding the disconnected diagrams and the possibility of IR cancellation by adding the contribution from these diagrams.

### I intend to submit my contribution for the proceedings

Yes

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