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## On the electromagnetic field of a focusing charged particle beam and its two-dimensional approximation

*Wednesday 4 June 2025 16:00 (2 hours)*

The analytical expressions for the electromagnetic potential generated from a focusing charged particle beam are indispensable in various beam physics problems. We review the theory in detail and point out the necessary assumptions made in the derivation.

### Footnotes

### Paper preparation format

LaTeX

### Region represented

America

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