



Common mistakes on "the production of electromagnetic waves" in many popular textbooks

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The present article uncovers a common mistake in many college physics textbooks, specifically, on its presentation and interpretation about generation and propagation of electromagnetic waves. It is found that the electric field in the popular presentation is not the radiating field, but static field, contrary to the book authors' presentations. The static field and the radiating field are fundamentally different fields, as one propagates out and one not. The two fields point in opposite direction so the figures used to illustrate the radiation field and its description in the books are wrong. The problem is wide spread and needs to be corrected and brought to the attention of the physics community.

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