Set 11 – due 19 April

"The sciences do not explain, they hardly ever try to interpret, they mainly make models. By a model is meant a mathematical construct which, with the addition of certain verbal interpretations, describes observed phenomena. The justification for such a mathematical construct is solely and precisely that it is expected to work." (J. von Neumann)

1) [10 points] Jackson 14.1. You can borrow a lot of the solution from the book and from notes in class, but it is still instructive–for me, the instruction is not to use the Lienard-Wiechart potentials when you can do a Lorentz transformation!

2) [10 points] Jackson 14.4. The answers should all look very familiar.

3) [20 points] Jackson 14.9, parts a, b, c only.