

*Electrodynamics I – Updated schedule for the  
exercise sessions 2003*

**Session no. 1, Friday 5/9**

- Extra problem no. 1: "Consider a hollow sphere...".
- Exercise 2.2 and 2.7 a-c in Jackson.

**Session no. 2, Monday 22/9**

- Some selected parts of the first set of home exercises: 1.1, 1.3, 1.4, 1.5, 1.10 and 1.12 in Jackson.

**Session no. 3, Monday 29/9**

- Exercise 4.1 and 4.6 in Jackson.
- Extra problem no. 2: "Start from the Biot-Sawart law...".

**Session no. 4, Wednesday 1/10**

- Extra problem no. 3: "Maxwell's equations in absence of sources... "
- Extra problem no. 4: "Show, using Maxwells equations, that...".
- Extra problem no. 5: "Explain why we are allowed to...".

**Session no. 5, Friday 3/10**

- Extra problem no. 6: "Derive the Lorentz-force from the action...".
- Extra problem no. 7: "Show that Maxwell's equations can be obtained from...".

**Session no. 6, Monday 13/10**

- The second set of home exercises (handed out by Fawad).

**Session no. 7, Monday 20/10**

- Extra problem no. 8: "Derive the expression for length contraction...".
- Extra problem no. 9: "Consider two frames  $S$  and  $\tilde{S}$ ...".
- Extra problem no. 10: "Consider a scalar field of the form...".
- Recapitulation and old exams.