In this last week we'll finish up our description of waves reflecting off a conducting medium (section 9.4) and dip into the potential formulation (sections 10.1 and 10.2). Although an important topic, we will not have time to delve into wave guides.

## **Problems:**

- (1) 9.18 Graph the Fresnel's equations to find data for diamond cutters.
- (2) 9.19(b) You are asked to calculate the thickness of a silver coating using the skin depth relation. Use the information in the table on page 297. Find the leading order of  $\kappa$ .
- (3) 9.20 About skin depth
- (4) 9.38 Can the fish see you?
- (5) 10.1 The box operator and the potentials
- (6) 10.3 An odd version of a very familiar field
- (7) 10.4 Waves another way