

Physics 142 - Fall 2005 - Problem Set 2

due Sept 15, 2005 @ end of Lecture

① Ohmic 23-3

I think this type of expt. is still the most sensitive way to search for fractionally charged (free) particles. Even today Martin Perl's group at SLAC (Stanford Linear Accelerator Center) is doing modern versions of the Millikan oil drop expt. See

<http://www.slac.stanford.edu/exp/mps/FCS/FCS.htm>

② 23-7

⑩ 24-4

③ 23-8

⑪ 24-7

④ 23-10

⑫ 24-8

⑤ 23-23

⑥ 23-28

⑦ 23-34

⑧ 23-38

⑨ 23-44