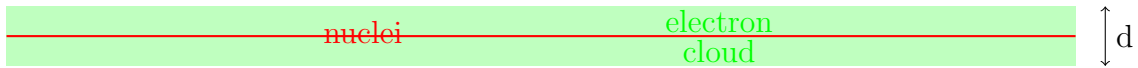


## Homework 6 - Fundamental interactions

Q6.1. Model the surface of an object by a infinitely thin sheet, of surface charge density  $\sigma$ , representing the atomic nuclei, surrounded by a uniform electron cloud, of width  $d$  and charge density  $-\sigma/d$ , as shown in the figure.



Describe the interaction between two such surfaces.