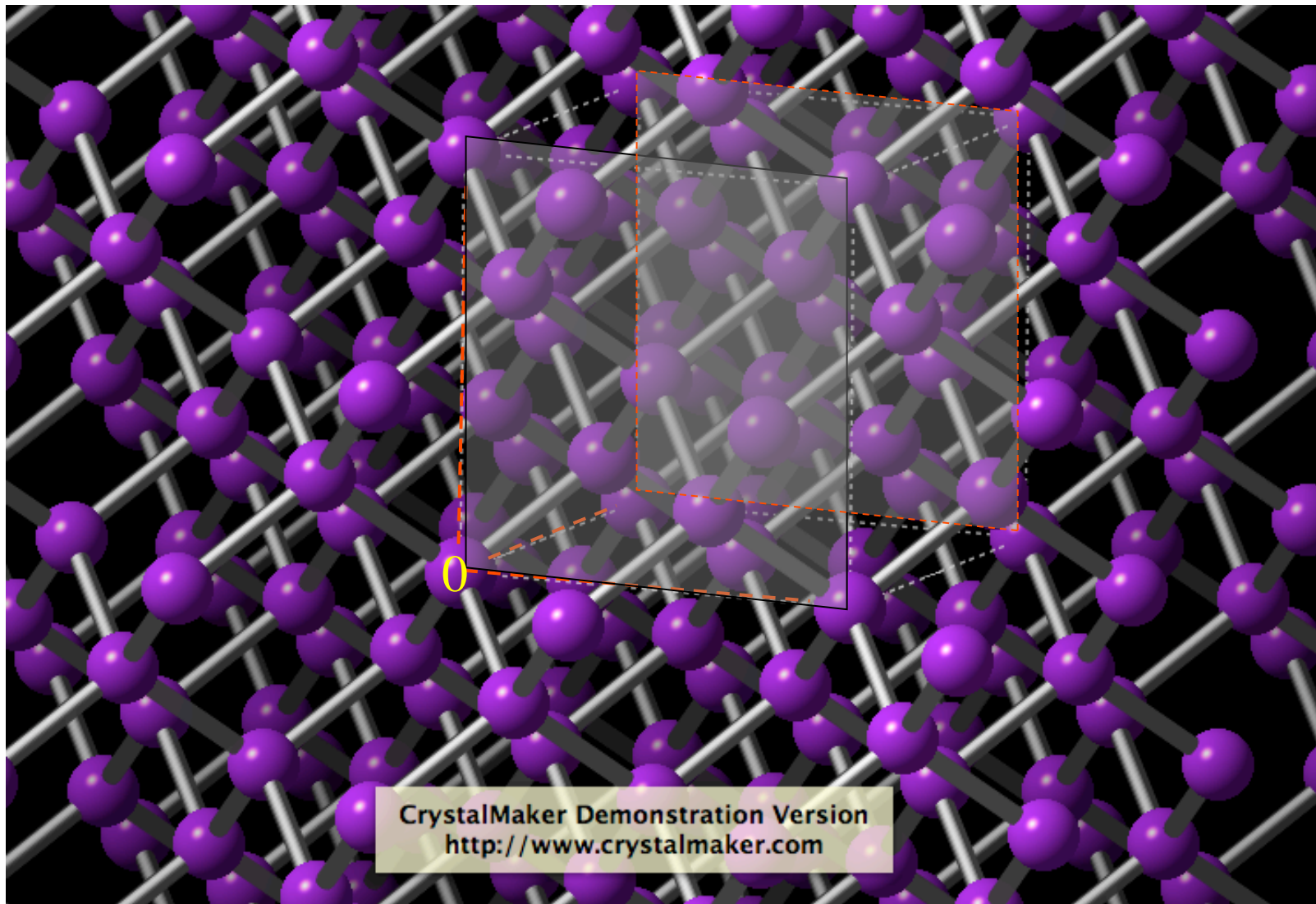


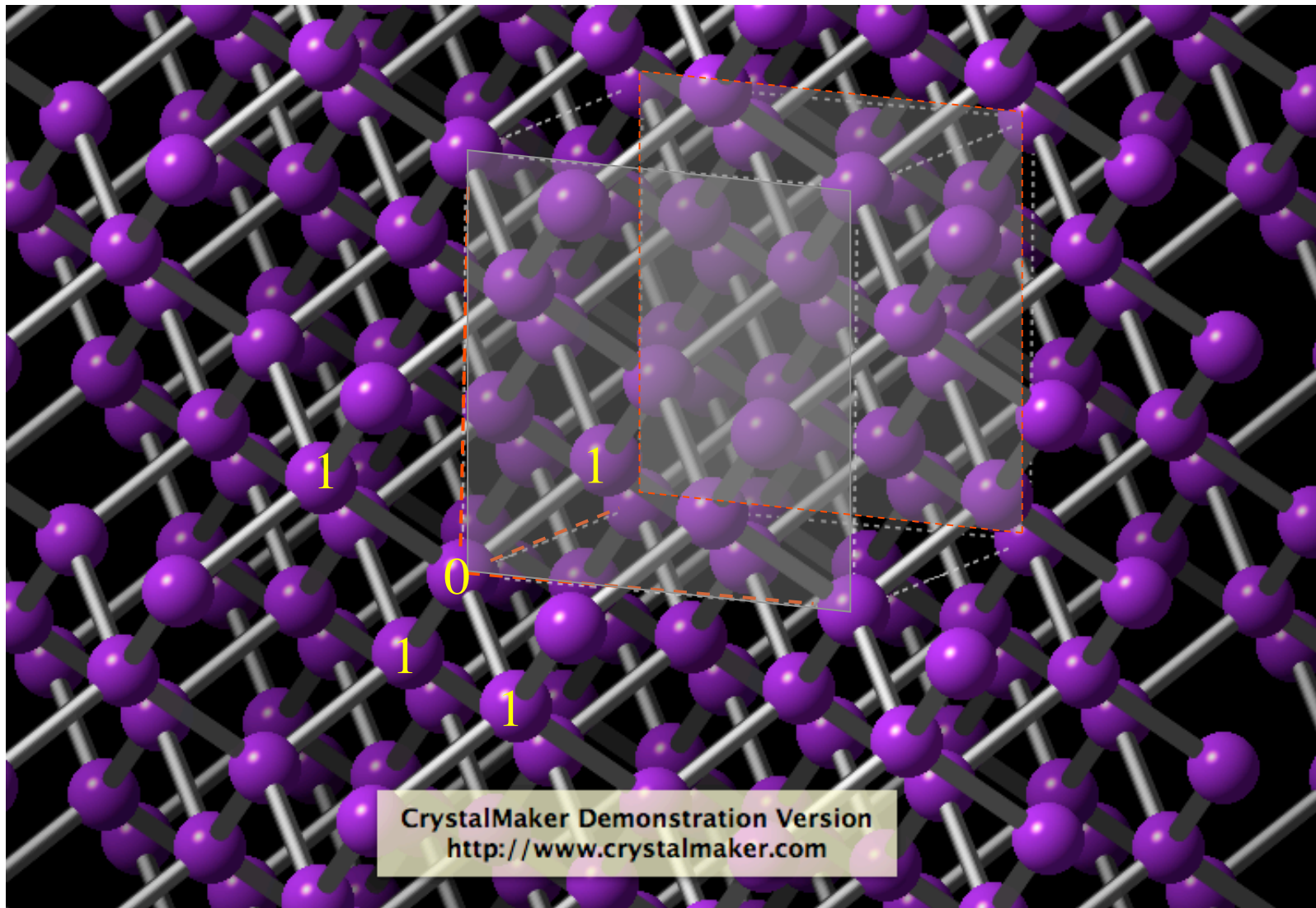
## FYS 4310 Problem 2

Si (diamond) Xtal lattice  
Origo and unit cell



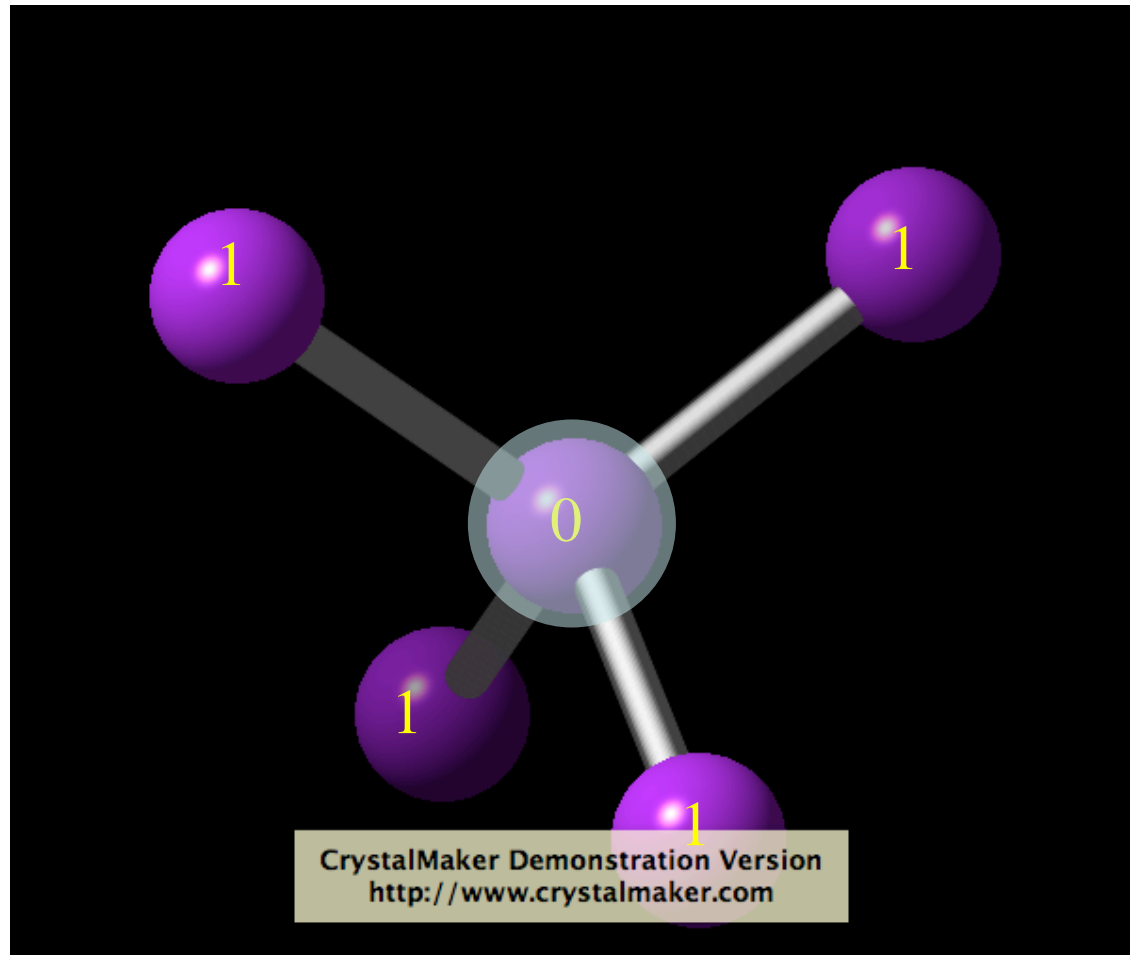
## FYS 4310 Problem 2

1st shell around origo



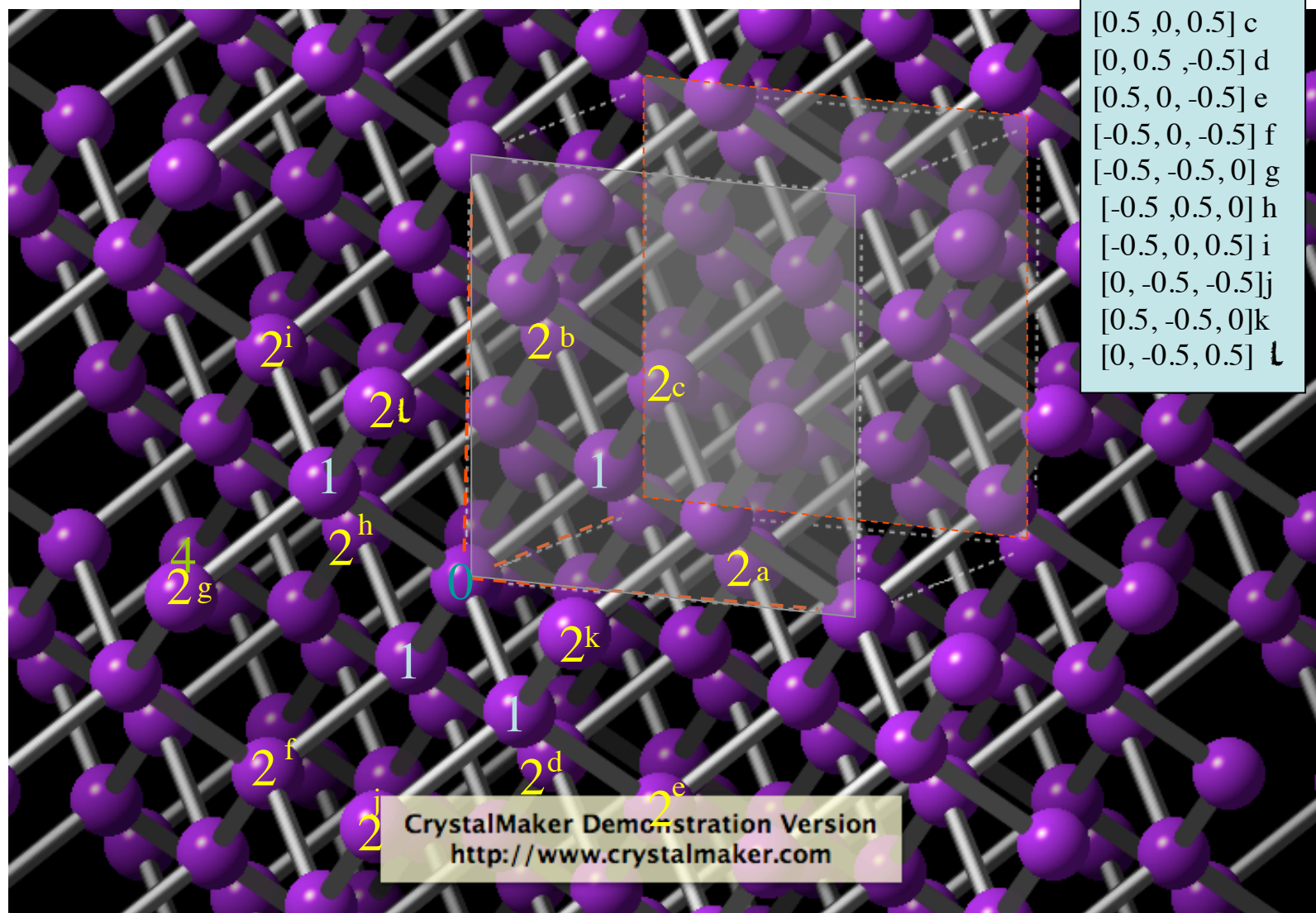
## Problem 2

1st shell around origo

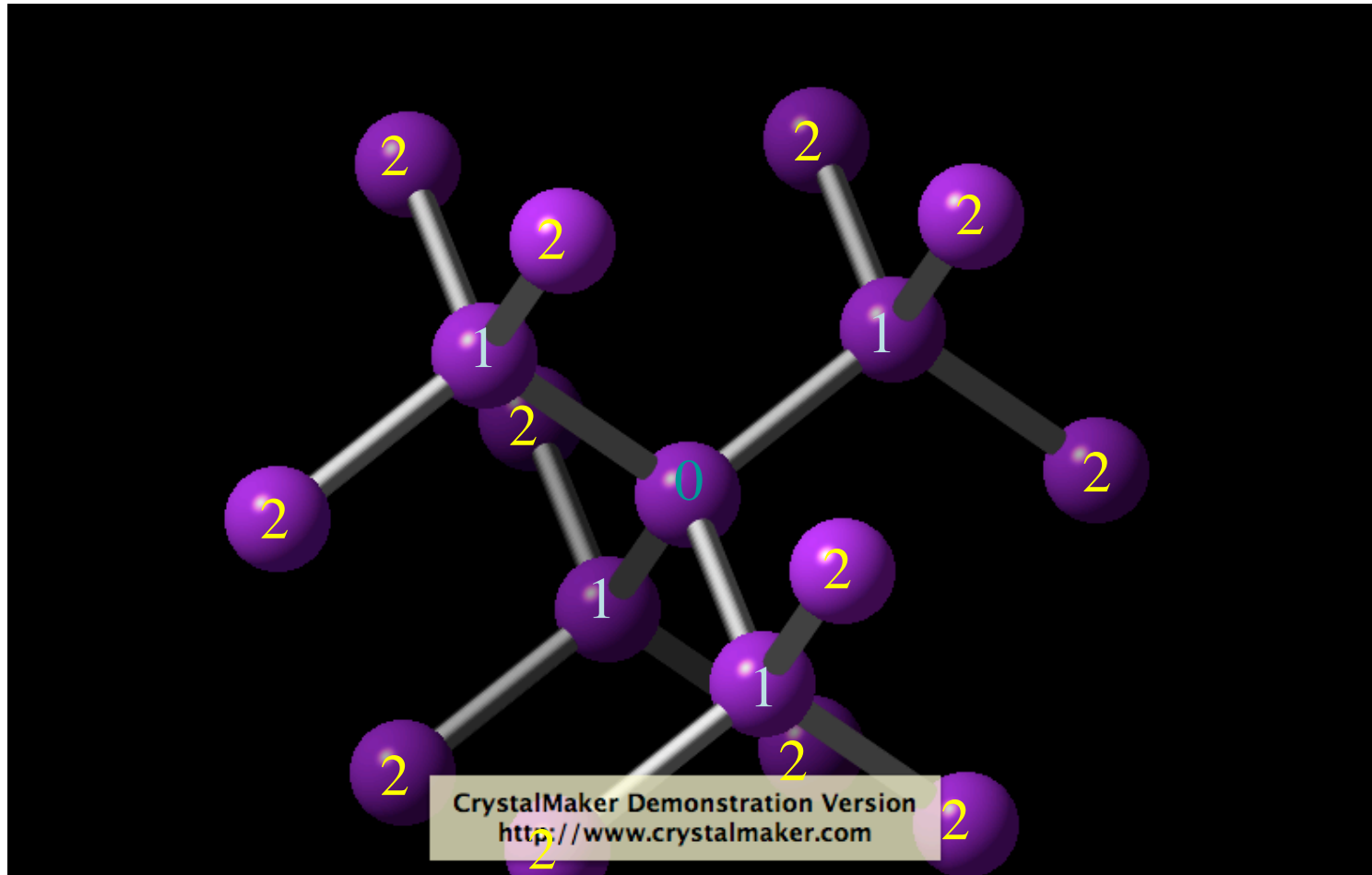




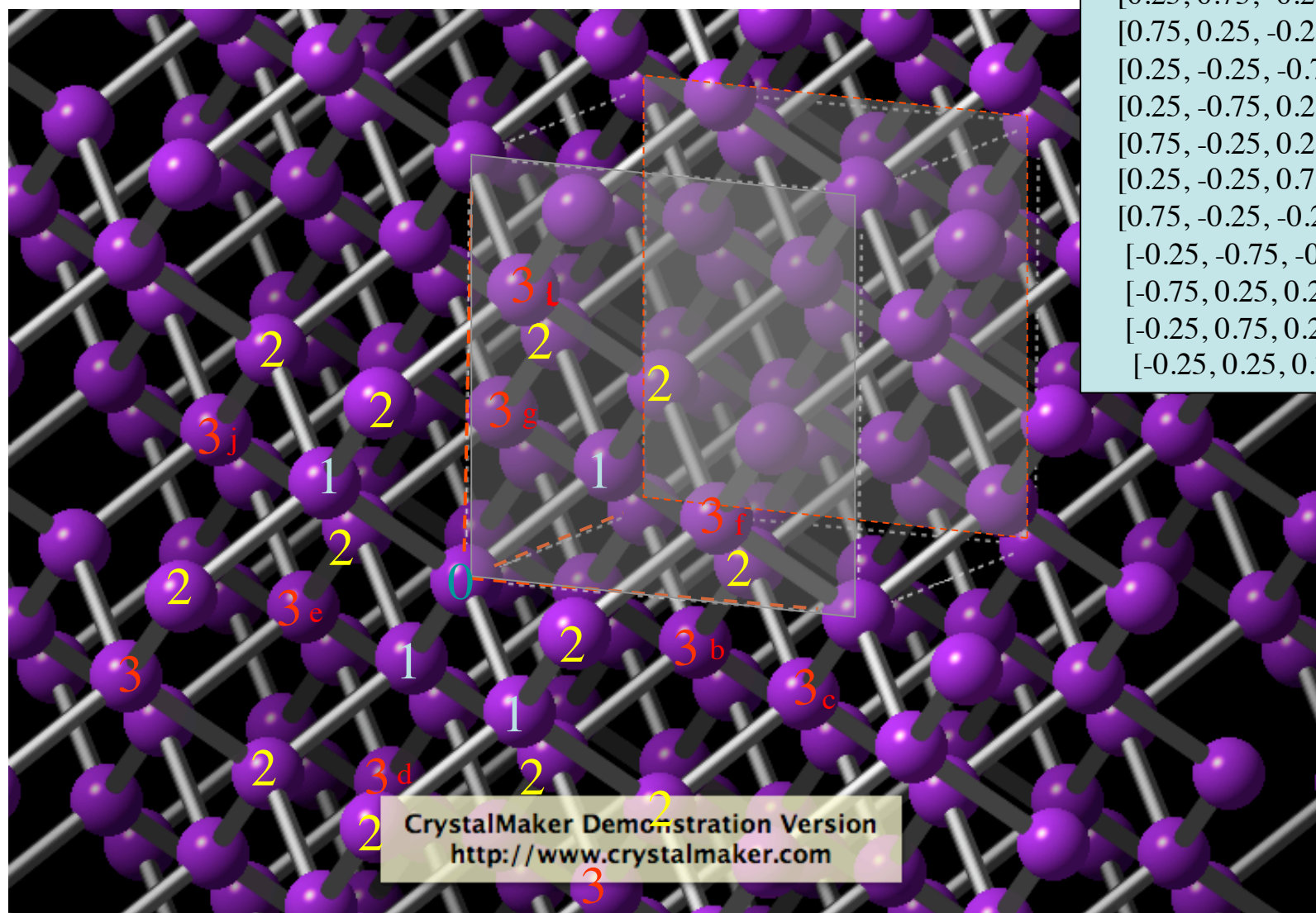
# FYS 4310 problem 2, 2nd Shell



## FYS 4310 problem 2, 2nd Shell



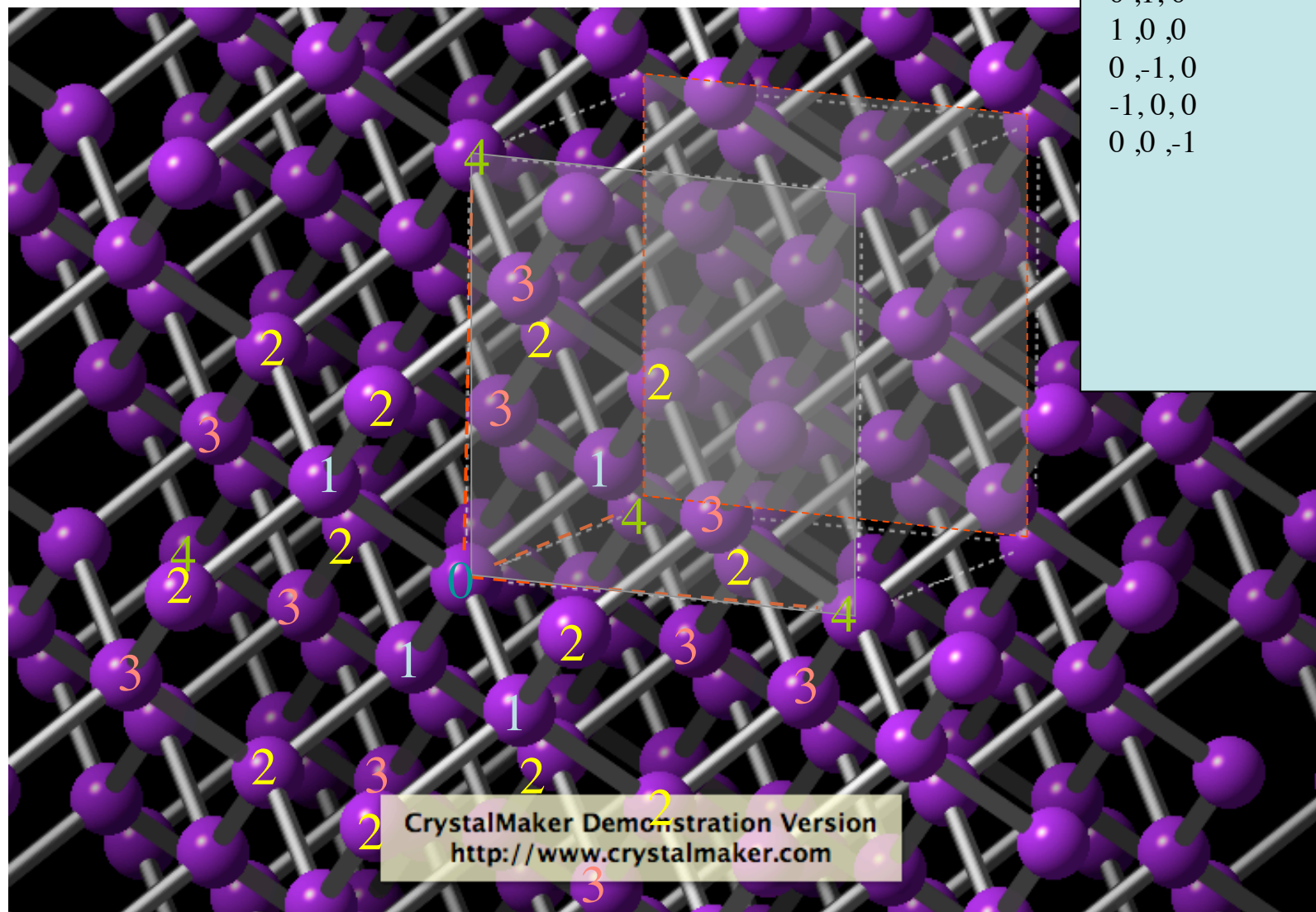
# FYS 4310 problem 2, 3rd Shell



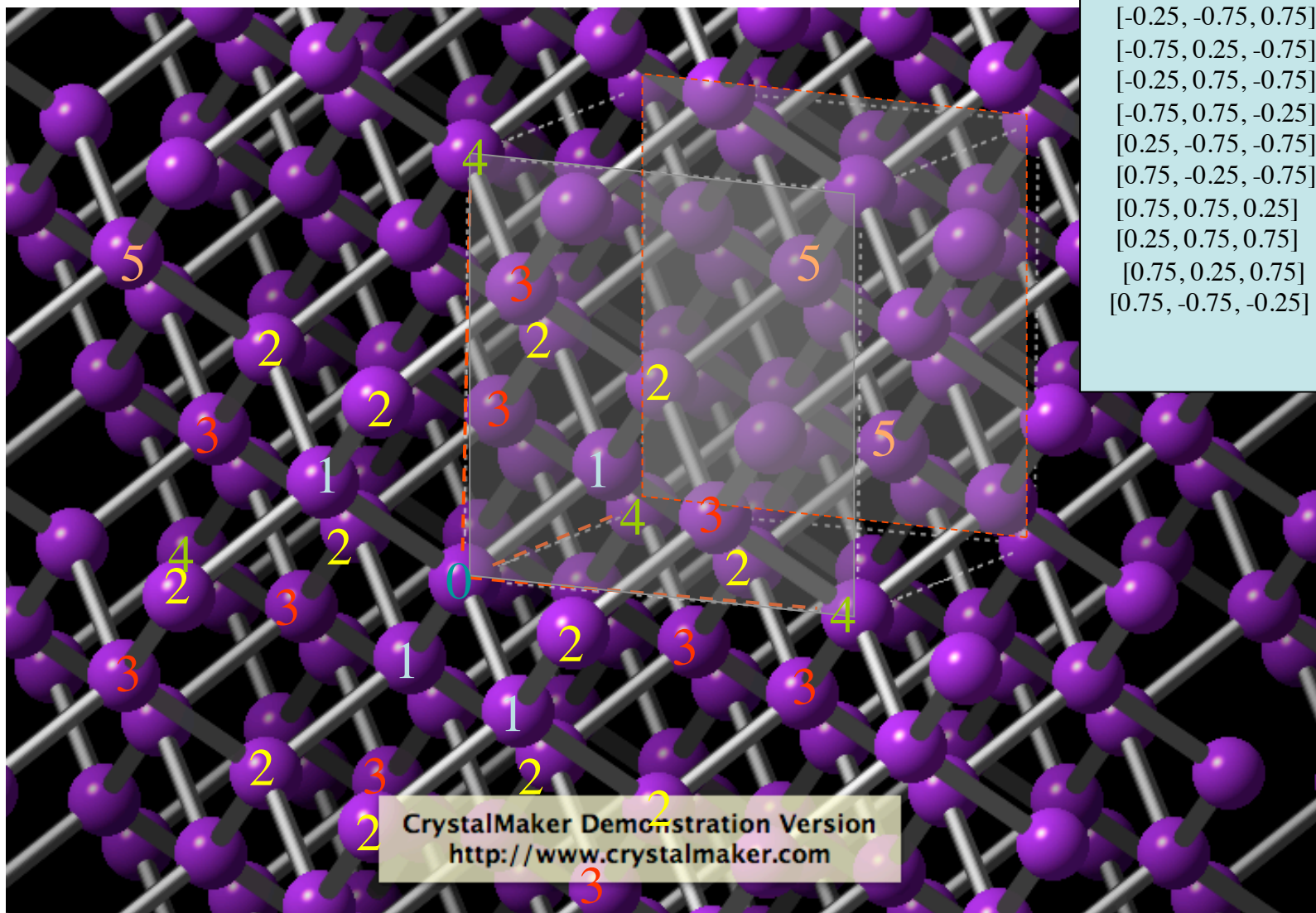
$[0.25, 0.25, -0.75]$   
 $[0.25, 0.75, -0.25]$  b  
 $[0.75, 0.25, -0.25]$  c  
 $[0.25, -0.25, -0.75]$  d  
 $[0.25, -0.75, 0.25]$  e  
 $[0.75, -0.25, 0.25]$  f  
 $[0.25, -0.25, 0.75]$  g  
 $[0.75, -0.25, -0.25]$   
 $[-0.25, -0.75, -0.25]$   
 $[-0.75, 0.25, 0.25]$  j  
 $[-0.25, 0.75, 0.25]$   
 $[-0.25, 0.25, 0.75]$  l



## FYS 4310 problem 2, 4th Shell



## FYS 4310 problem 2, 5th Shell





## FYS4310 Oppg. 2

Atoms in different shells have been given different colors and have been numbered according to the shell. The origo is '0' (grey)

