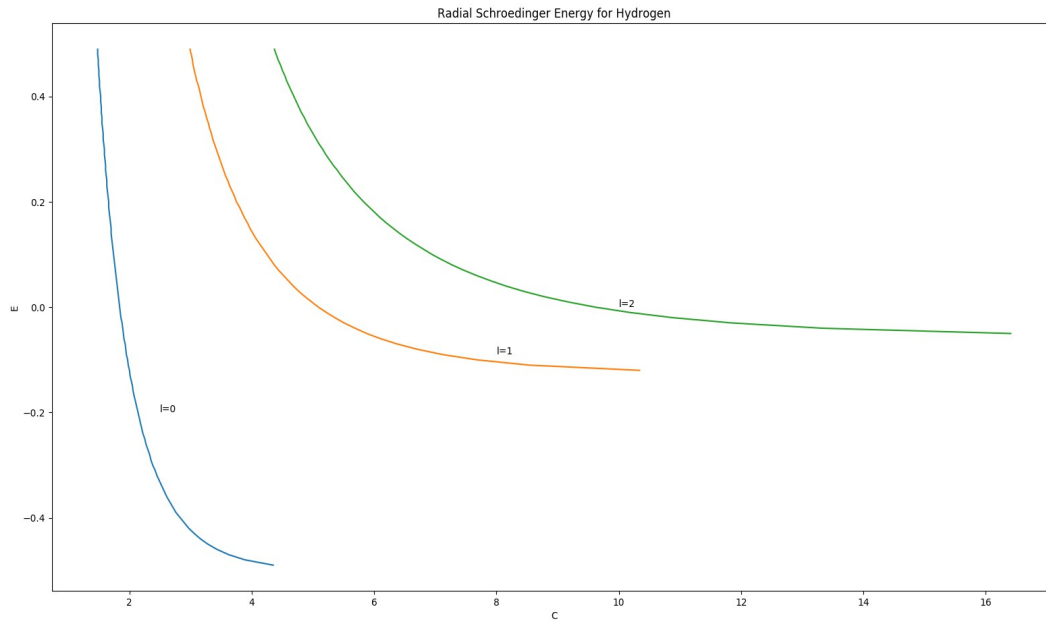


Daniel Graham  
03/06/17

## Project #4



The energy in hartrees for the hydrogen atom are:

$l=0$  : -0.49

$l=1$ : -0.12

$l=2$ : -0.05

I updated the given algorithm because there was a factor of two missing in the  $g$  function so the  $g$  function I used is:  $2 * (l(l+1)/(2*r^2) + (V(r) - E))$ . This gave me the correct energy values.