

## PHYS2063 Wave Physics Homework #18 Due Tuesday 1 Nov 2022

*This homework assignment is due at the start of class on the date shown. You may submit a PDF of your solutions to the Canvas page for the course, or bring a paper copy to class.*

A beam of helium atoms emerge from a double slit mask and impinge on a screen 1950 mm away. The spacing between the slits is  $8\ \mu\text{m}$ . For the atoms which take  $800\ \mu\text{s}$  to reach the screen, how far apart are the interference maxima? You can check your answer against the figure we showed in class and the paper from which it was taken, both of which have links on the course web page.