To use the Double\_Slit QuILT effectively please follow these steps:

1. Answer the question on the double\_slit pre-test to the best of your ability.

This QuILT makes use of the double slit simulation. Unpack all of the files included in “Double\_Slit\_Simulation.rar” into one folder, and then run the file “Doppelspaltversuch.exe” from the main folder when ready to run the simulation. The simulation was developed by Klaus Muthsam (**muthsam@habmalnefrage.de**)

1. Work through the double\_slit warm-up to get ready for the QuILT
* This warm-up requires use of the simulation.
1. Work through the double\_slit QuILT which will cover the material from the pre-test (and post-test).
* This QuILT requires use of the simulation.
1. Answer the question on the double\_slit post-test to check your understanding of the double slit experiment.
2. Work through the double\_slit homework which should help you connect the double slit material learned in steps 2 and 3 above with Dirac notation.
* Please note that this step 5 (homework) can be done before the post-test (step 4).

Note to instructors:

The double slit warm-up is optional, as many of the questions in the warm-up cover the basics (de Broglie relationship, basics related to the double slit-experiments such as what happens to the distance between adjacent fringes if some parameter is changed, e.g., the mass of the particle used, the distance between the slits etc.)