
TUTORIAL FOR THE EXAMPLE: ELLIPSE PACKING

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In this example 100 ellipses are placed in a rigid container but positioned as a regular space filling array . The particles are released from these positions under a gravitational force that is 10 times g . The particles are colliding between each other and with the rigid walls, and dissipating energy by both viscous damping and the frictional forces.

To run this example, double click on RunY.bat located in the folders: “\VGW_QMULIC\DEV\Y2D\Packing”.

After running the above example, Y will produce a series of output files with extension .ym. These are postprocessed using the Mayavi program. Mayavi is Open Source and it has been included in VGW package. To see more information, please visit Mayavi official website, <http://mayavi.sourceforge.net/>. The easiest way to start Mayavi is to double click on ViewResultsUsingMayavi.bat files.

Postprocessing in Mayavi:

The results are postprocessed using the Mayavi program. To visualize results, several simple operations are described as follows

Visualizing animations To visualize animation, just left click “configure data” in top of left panel, a window, “Configure VtkXMLDataReader module” appears. Then click “auto sweep” box, you can watch you results frame by frame.

Zooming in and out To zoom in and out of the scene, first you place the mouse pointer inside the right visualization window. To zoom into the scene, you can keep the right mouse button pressed and drag the mouse upwards. To zoom out of the scene, you can keep the right mouse button pressed and drag the mouse downwards.

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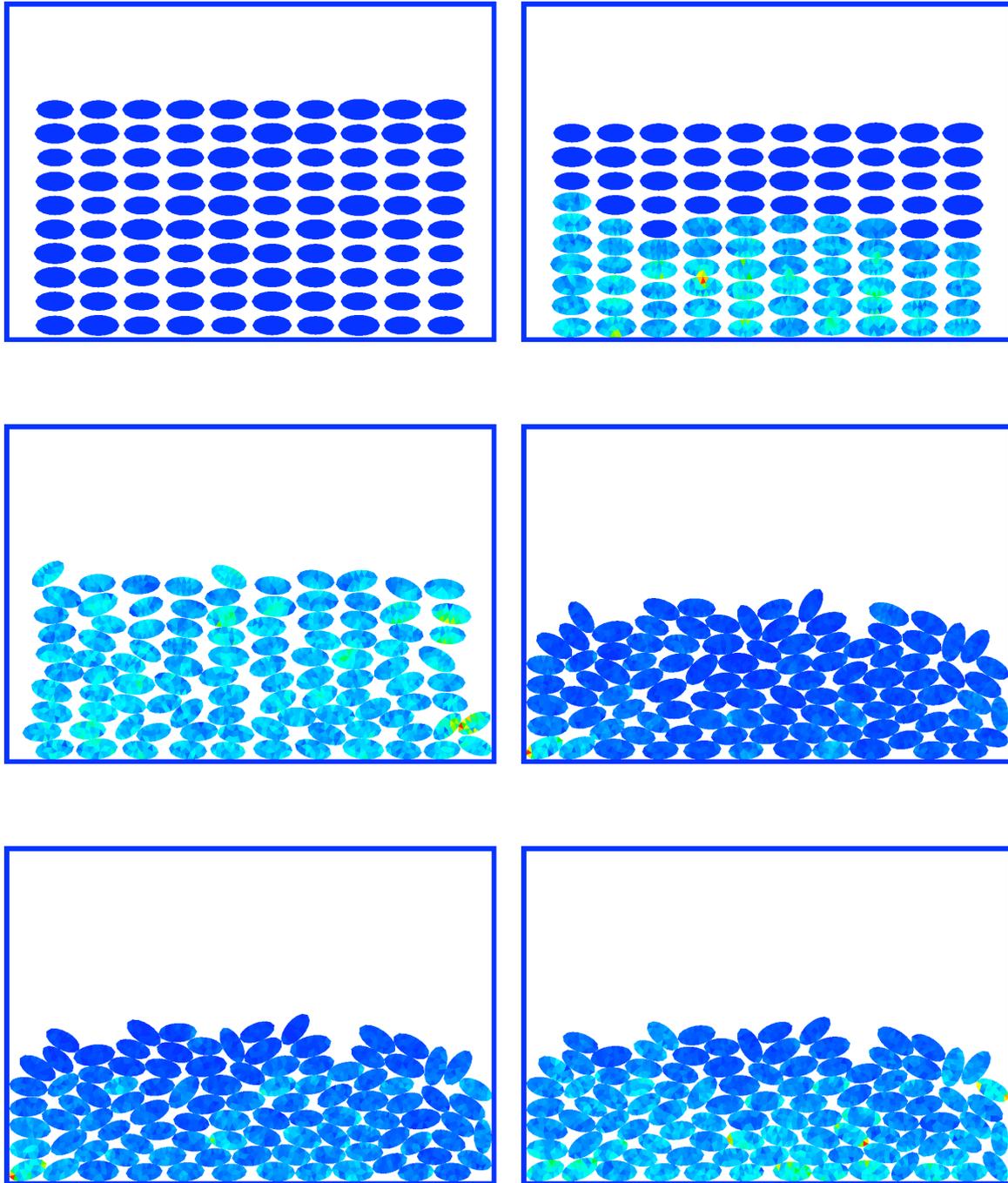


Figure 1. Some snapshots from a simulation of the deposition of ellipse packing