Instructions to run the **Adaptive Image-Based Domain Decomposition for CDM** code

**(ensure that compatible versions of MATLAB and Python are installed)**

1. Start MATLAB and open the “**FEM\_Main\_Script.m**” file.
2. Right-click on the MATLAB icon at the taskbar and open a second instance of MATLAB.
3. In the second MATLAB window, navigate to the same directory where the “FEM\_Main\_Script.m” is, and hit “**matlab.engine.shareEngine**” in the command window.
4. In the “FEM\_Main\_Script.m” file (1st MATLAB window), uncomment line 14, put a debugger at line 19, and run the file until that point to initiate the communication between MATLAB and Python.
5. In the “FEM\_Main\_Script.m” file (1st MATLAB window), comment out line 14, remove the debugger, and run the script for the desired mesh file. The mesh filename is specified in line 52.