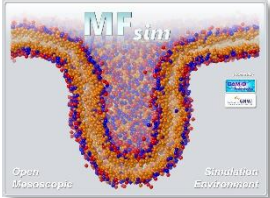


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2.2.4.0



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GitHub repository:
<https://github.com/zielesny/MFsim>

Download and Install (MS Windows)

Download Windows OS installer executable ***Install MFsim 2-2-4-0.exe*** from folder *Installer for Windows OS* at MFsim GitHub repository ***<https://github.com/zielesny/MFsim>***.

Start the installer executable by a double-click and follow the instructions.

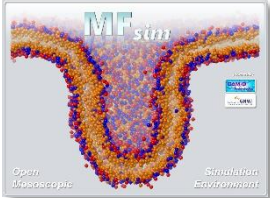
MFsim is installed by default in the Windows *Program Files* directory at ***C:\Program Files\GNWIMFsim 2.2.4.0***. Open that folder with several MFsim start batch files named ***Start_MFsim_64bit_<memory>GB.bat*** where *<memory>* defines the memory consumption of the Java virtual machine (JVM). Create a shortcut to an appropriate MFsim *start batch file* on your desktop that best fits your hardware resources and needs (e.g. for a computer with 16 gigabyte of available RAM the batch file *Start_MFsim_64bit_8GB.bat* could be appropriate and would use up to 8 gigabyte of RAM).

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Program Start

Start MFsim ...



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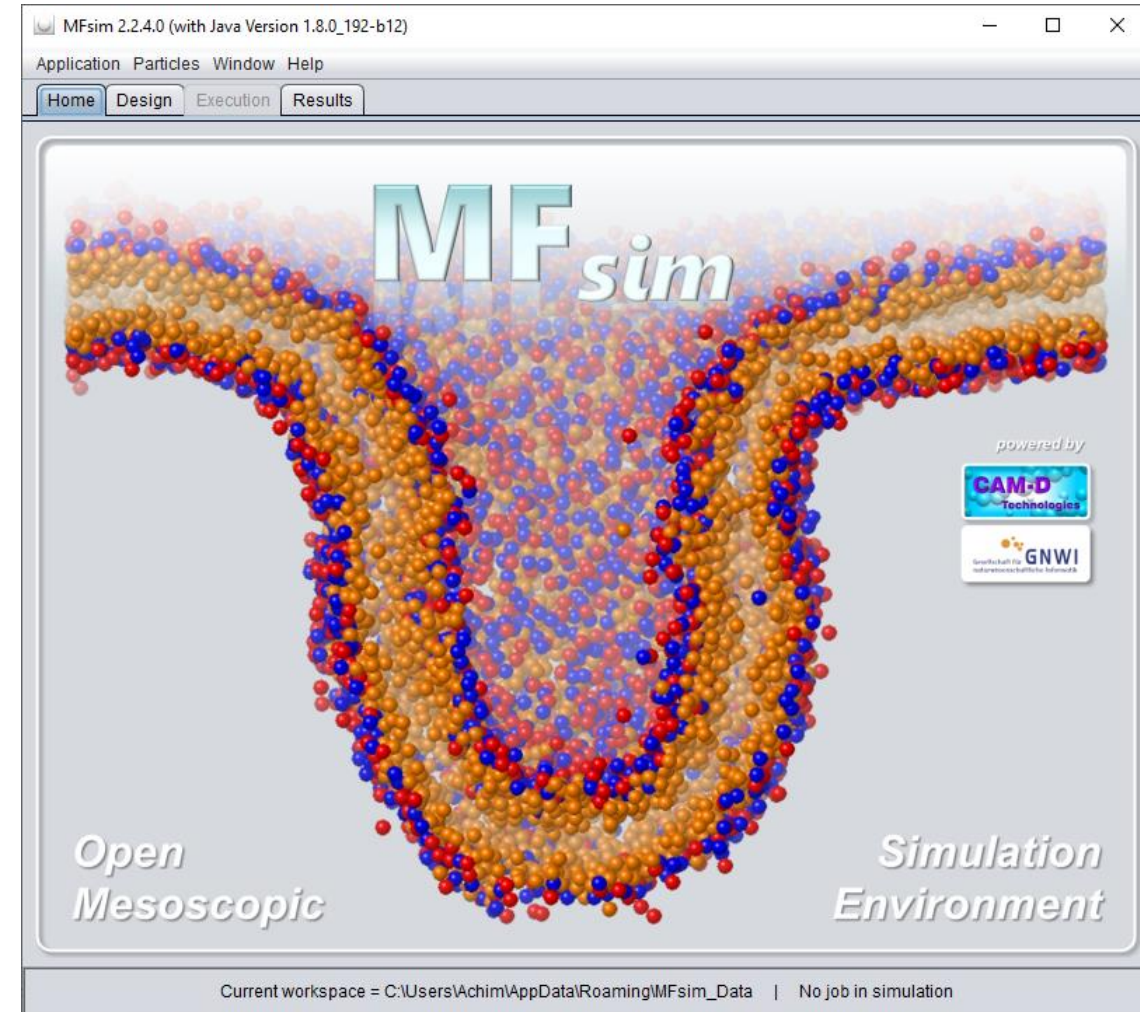


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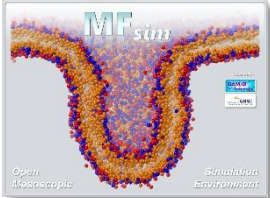
GitHub repository:
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Particle Set Choice

... *Choose particle set* ...



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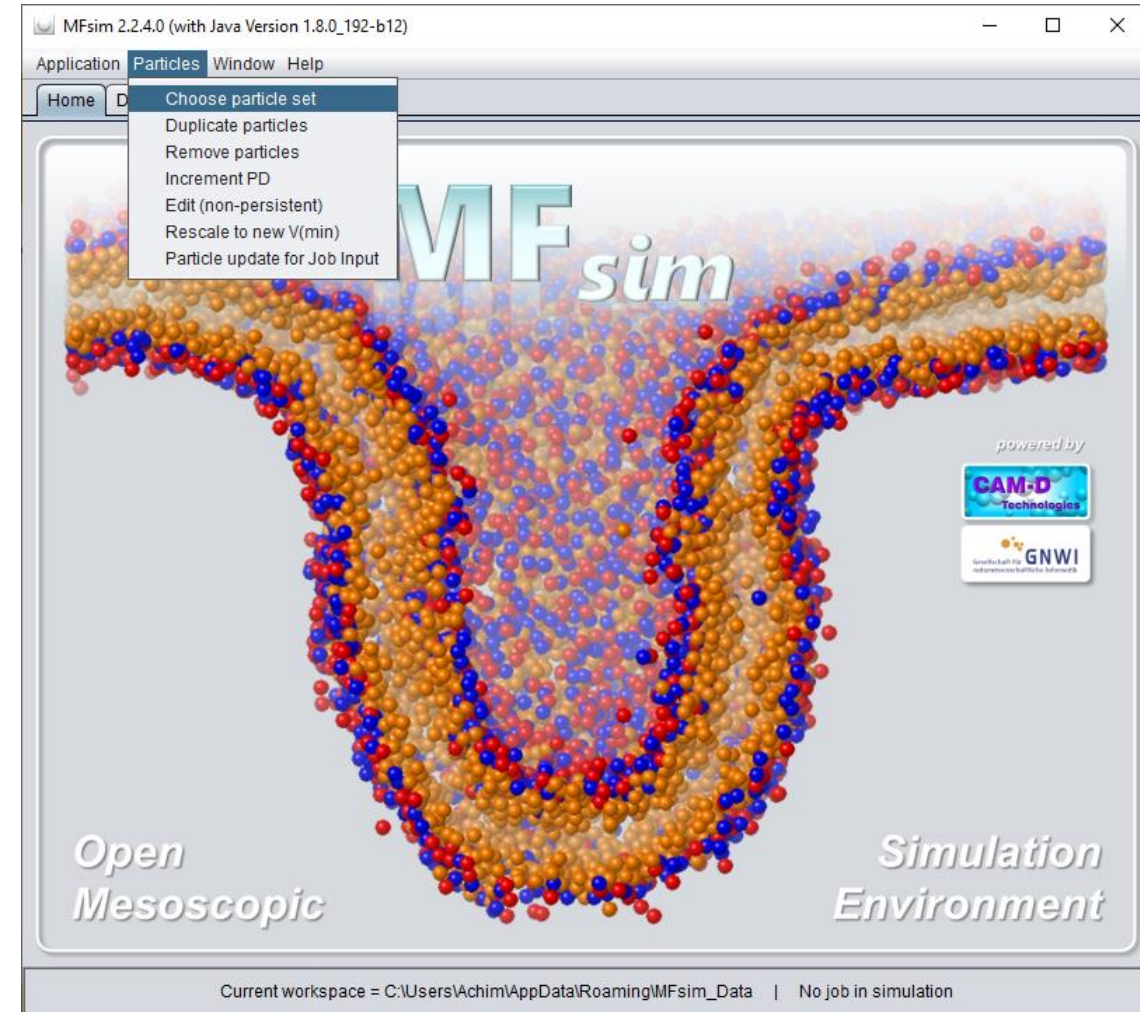


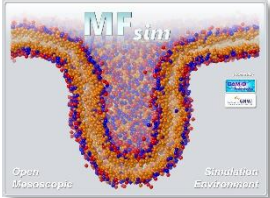
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GitHub repository:
<https://github.com/zlelesny/MFsim>





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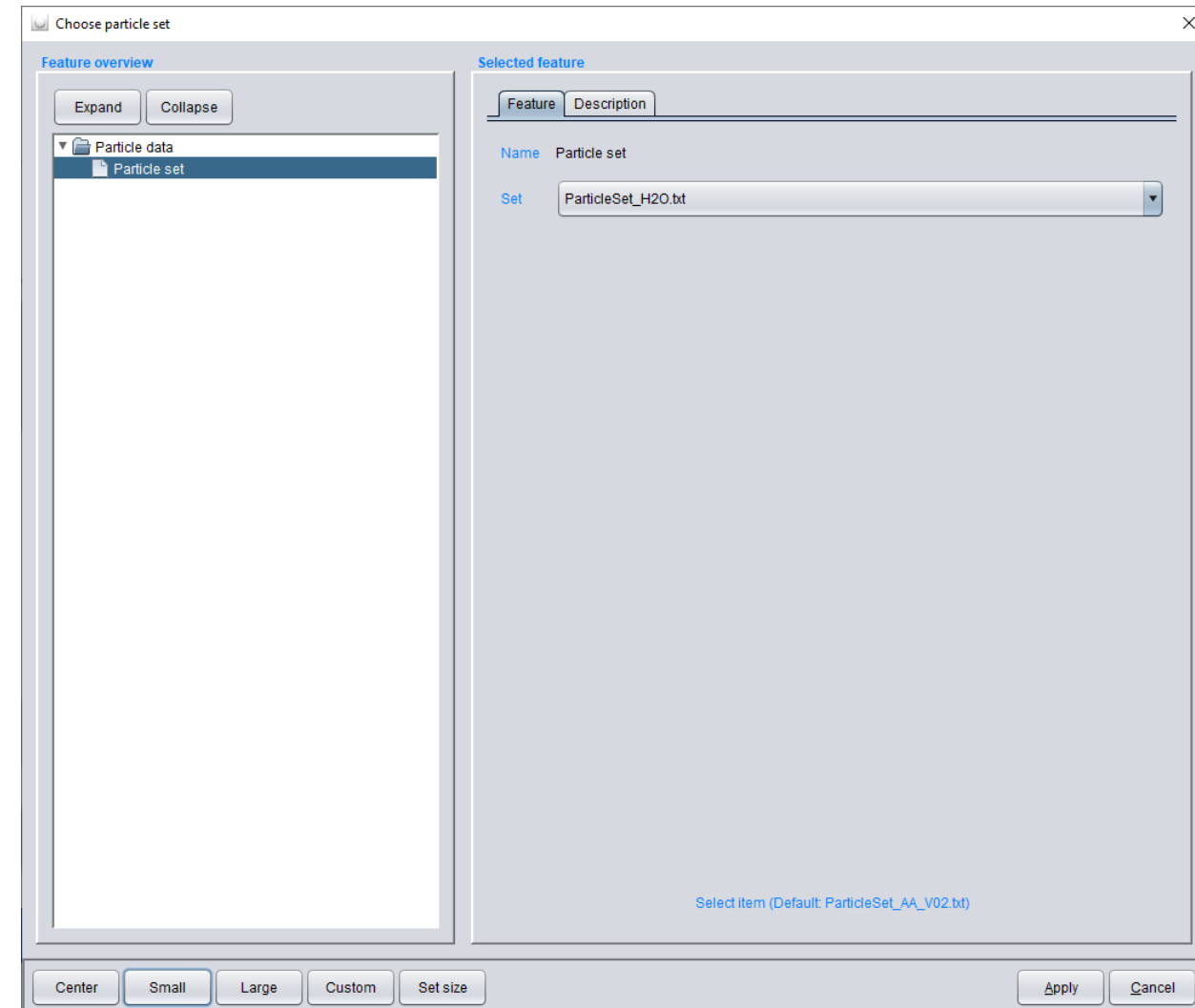
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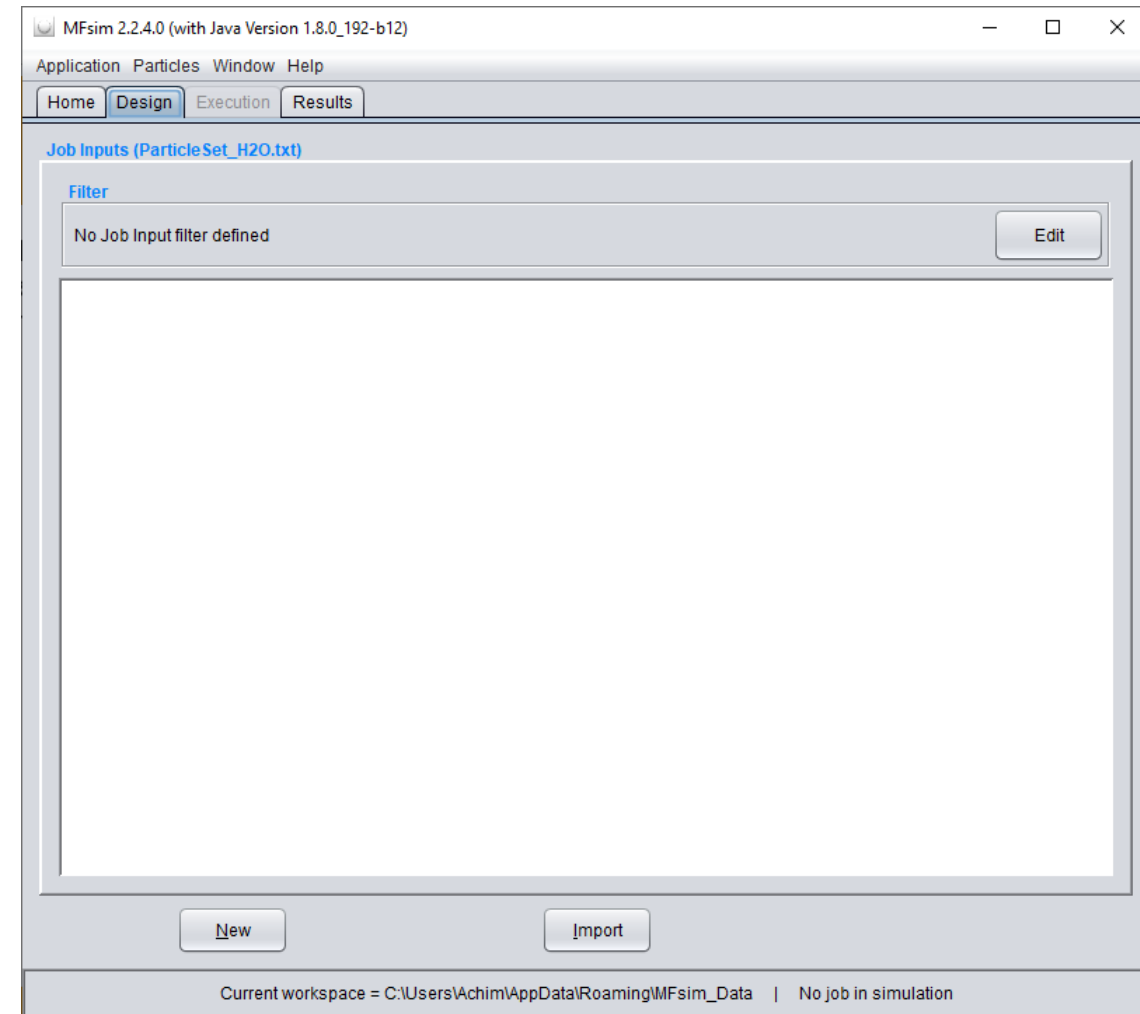
... *ParticleSet_H2O.txt* and **Apply** (note, that this minimum particle set with just one water particle is to be used for test purposes only).

Particle Set Choice



Design of new Job Input

Select the **Design** tab (where the chosen particle set is displayed for new Job Inputs) and hit the **New** button for a new Job Input.



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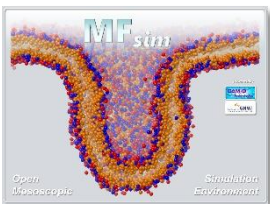


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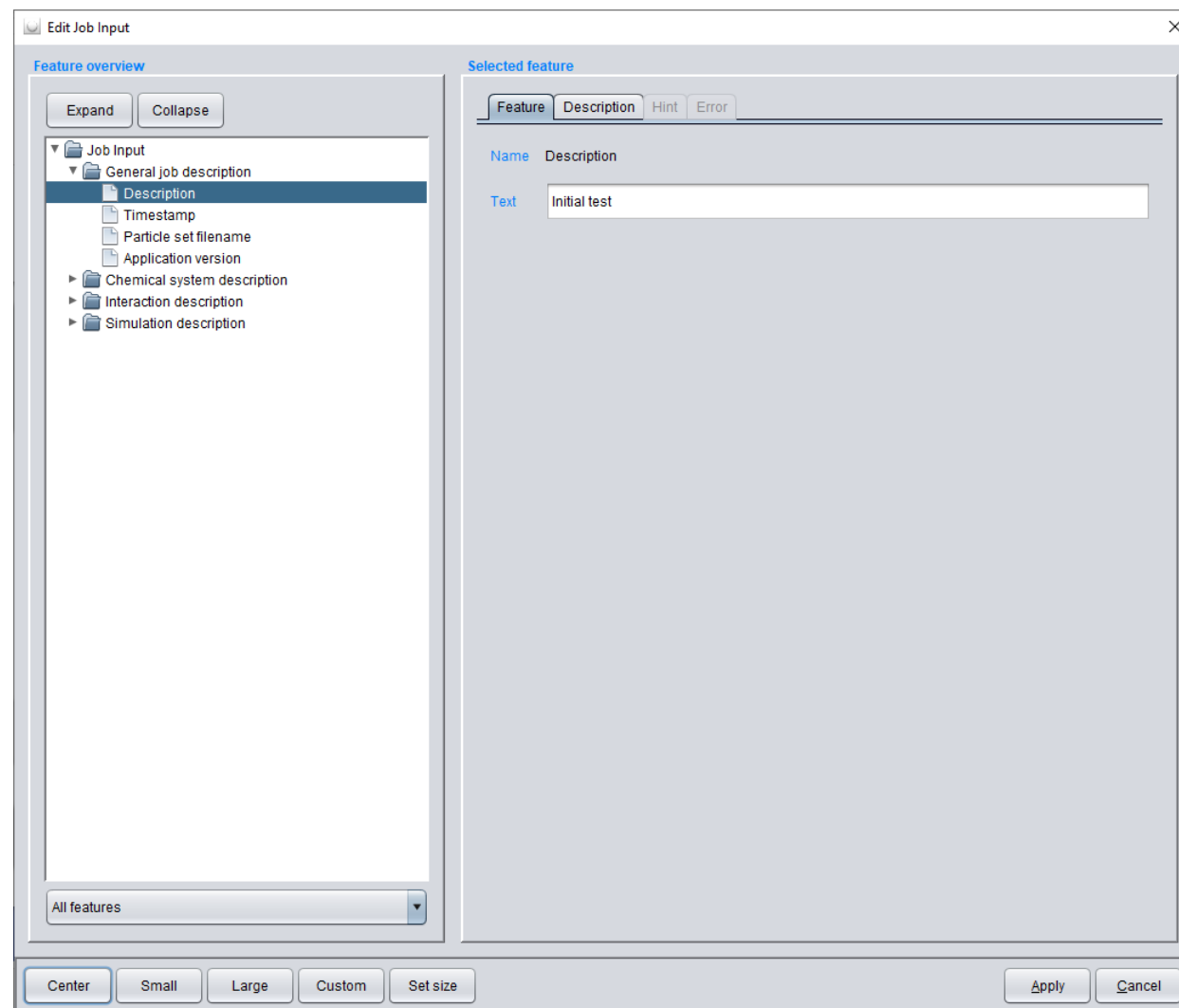
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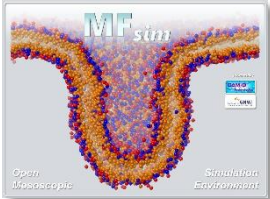
Change the **Description** to *Initial test* ...

Design of new Job Input



Design of new Job Input

... and go to **Compartments and box view**. Hit the **View** button ...



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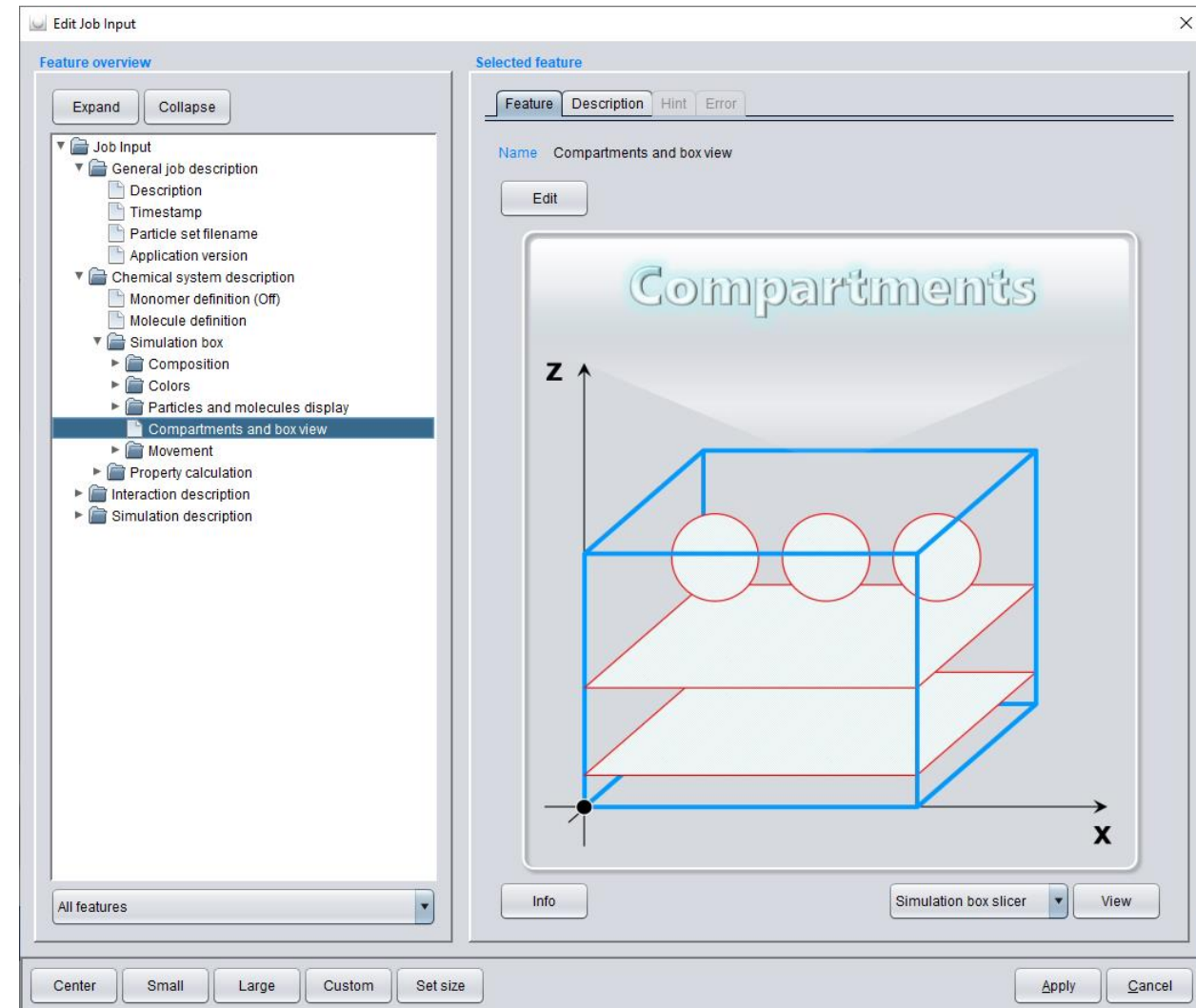
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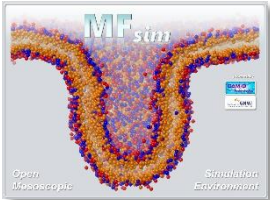


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Design of new Job Input

... to display the simulation box filled (randomly) with (24.000) water particles (the default Job Input that is automatically generated). **Cancel** the dialog ...



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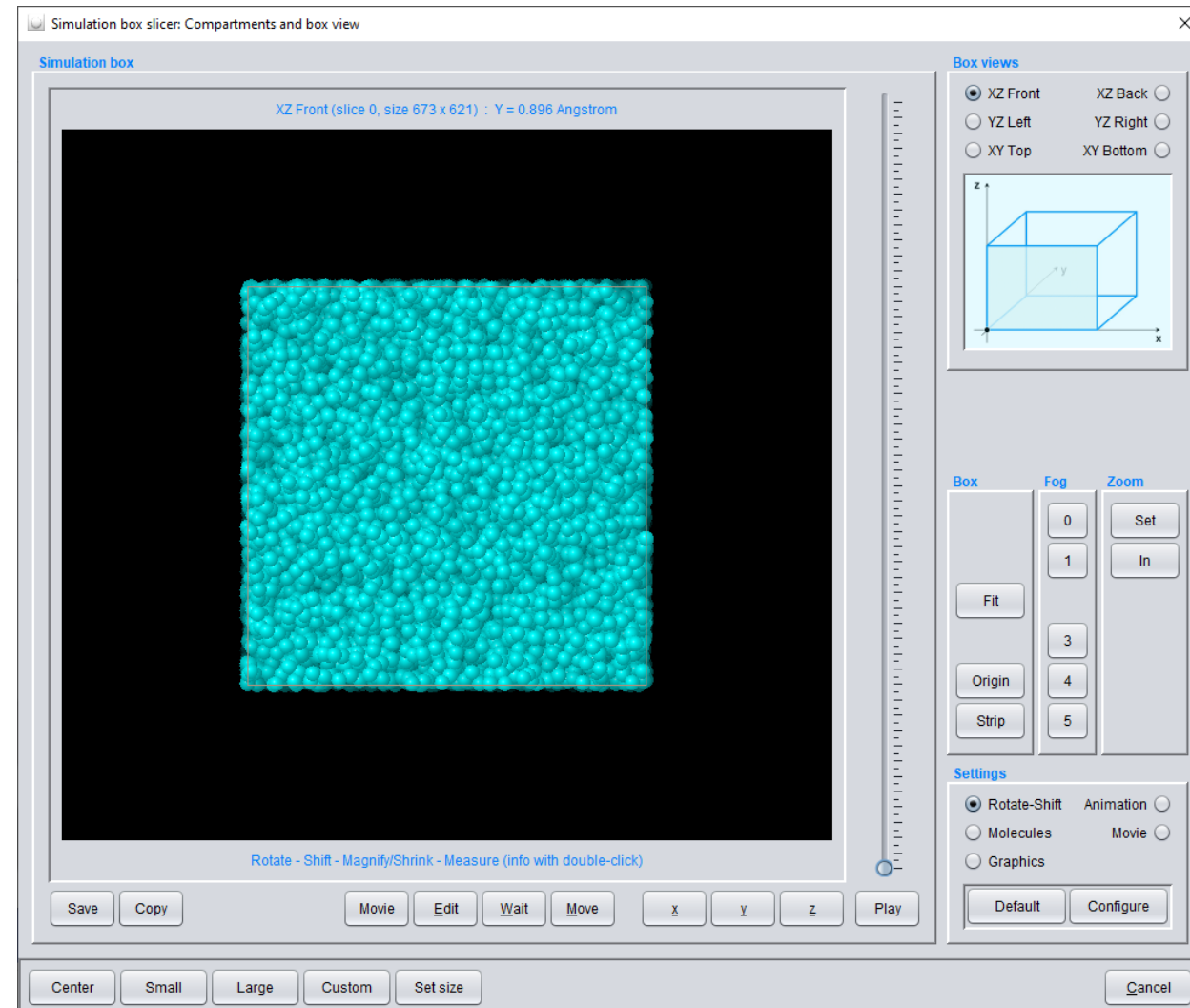
powered by



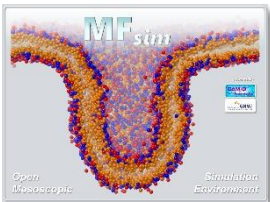
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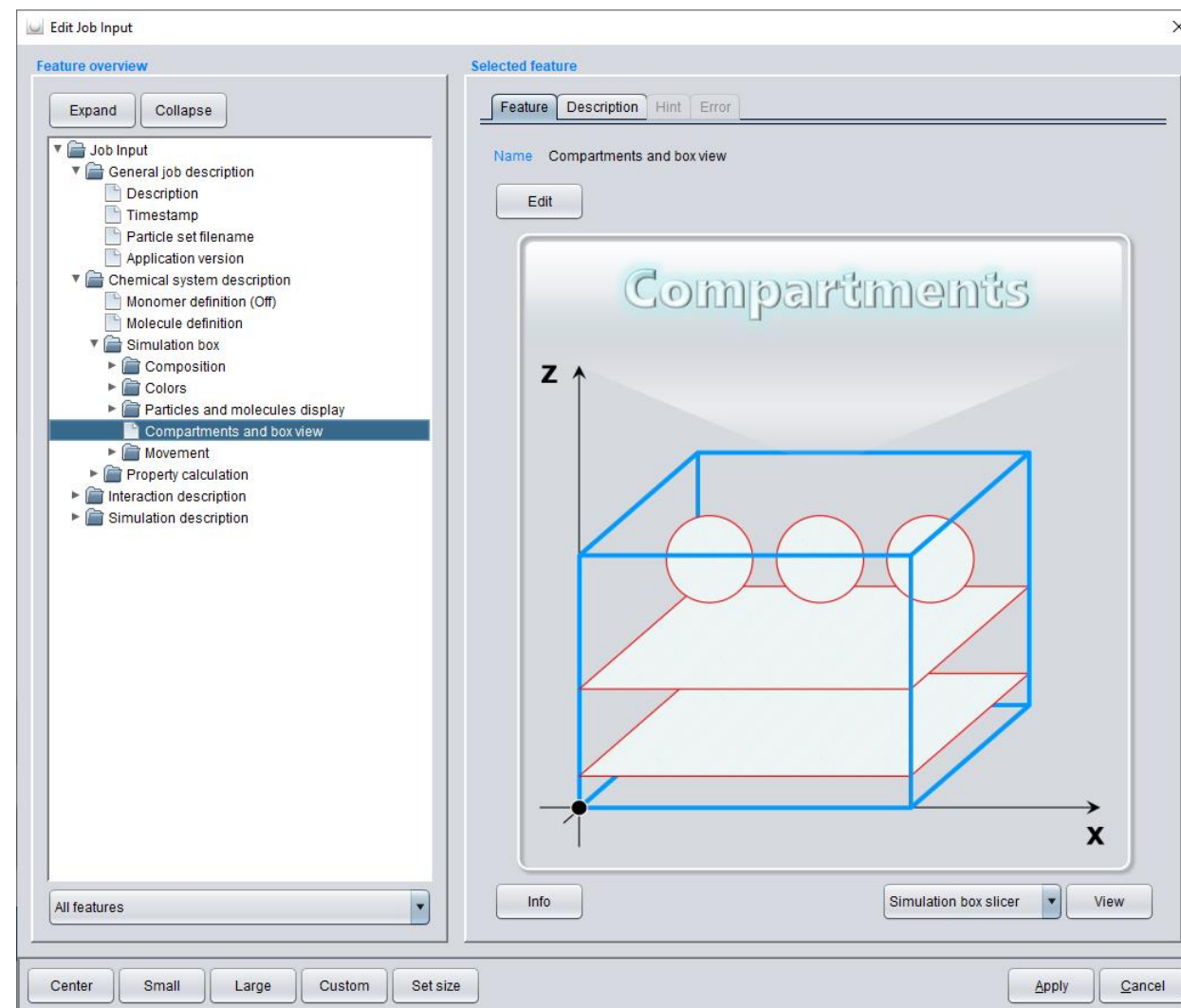
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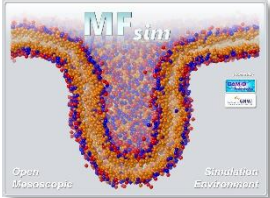
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... and **Apply** the Job Input settings.

Design of new Job Input



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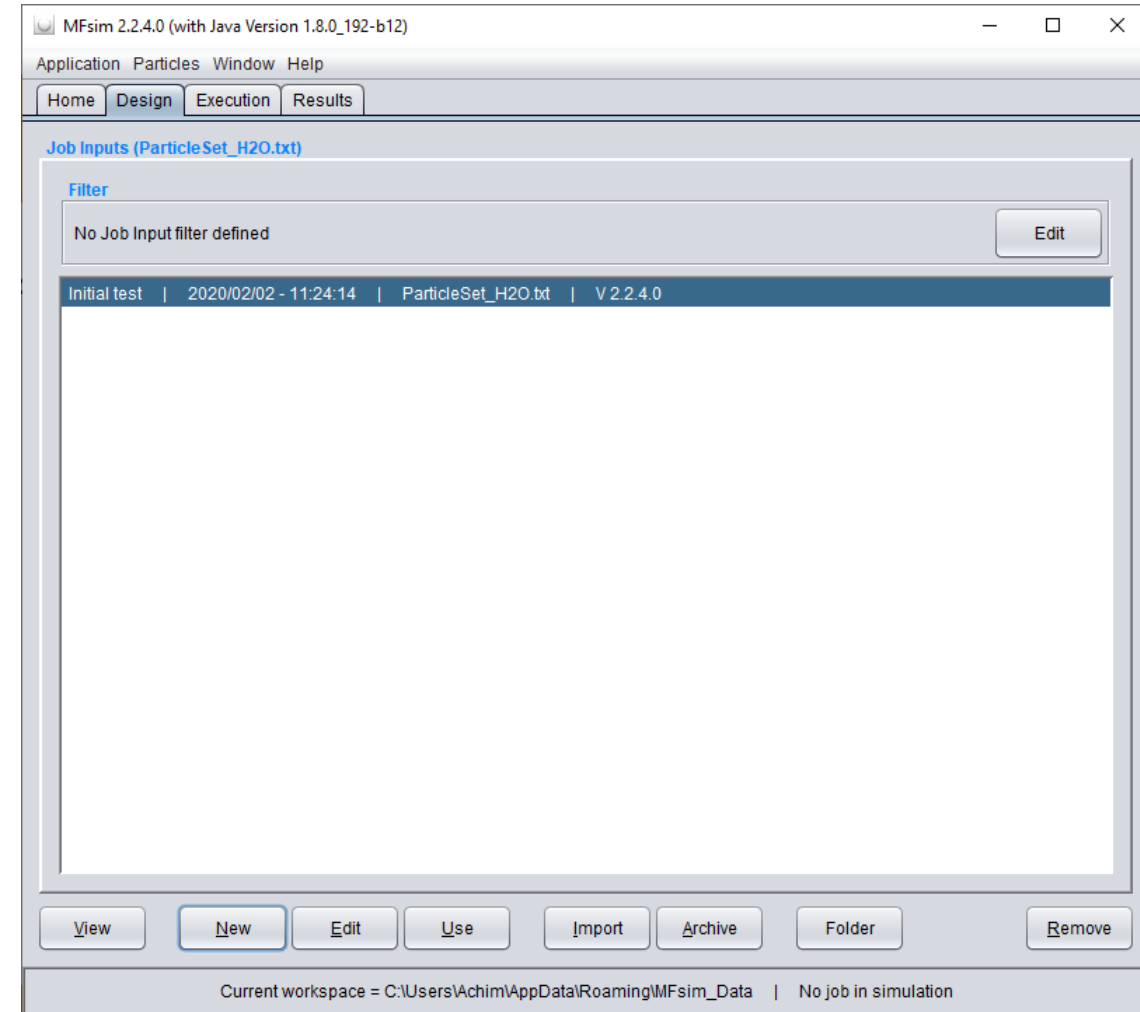


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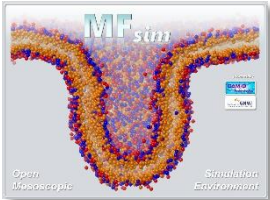
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A new Job Input is created and the **Execution** tab is activated:



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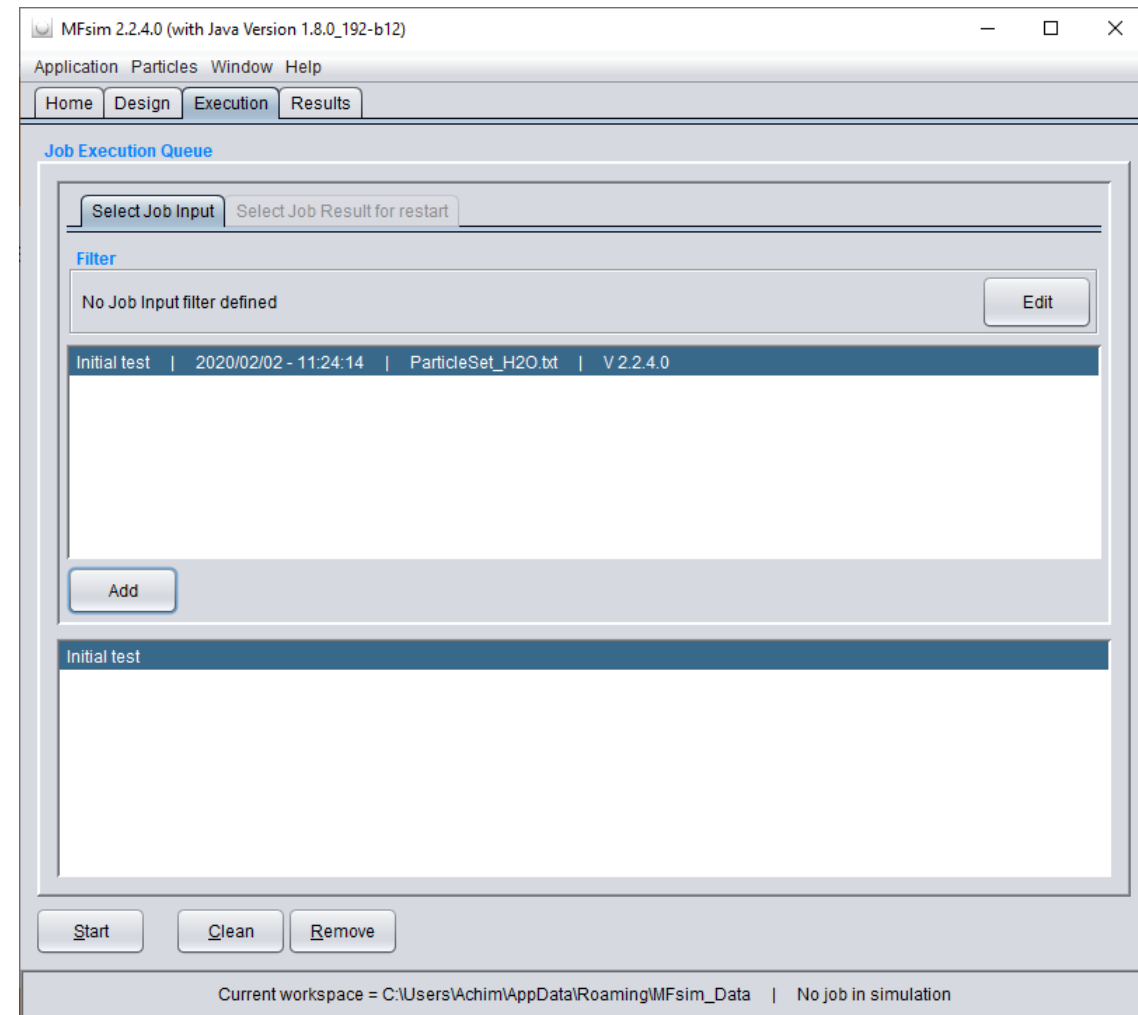


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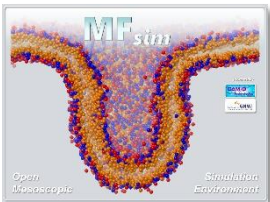


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Click the **Execution** tab and **Add** the new Job Input to the job execution queue:



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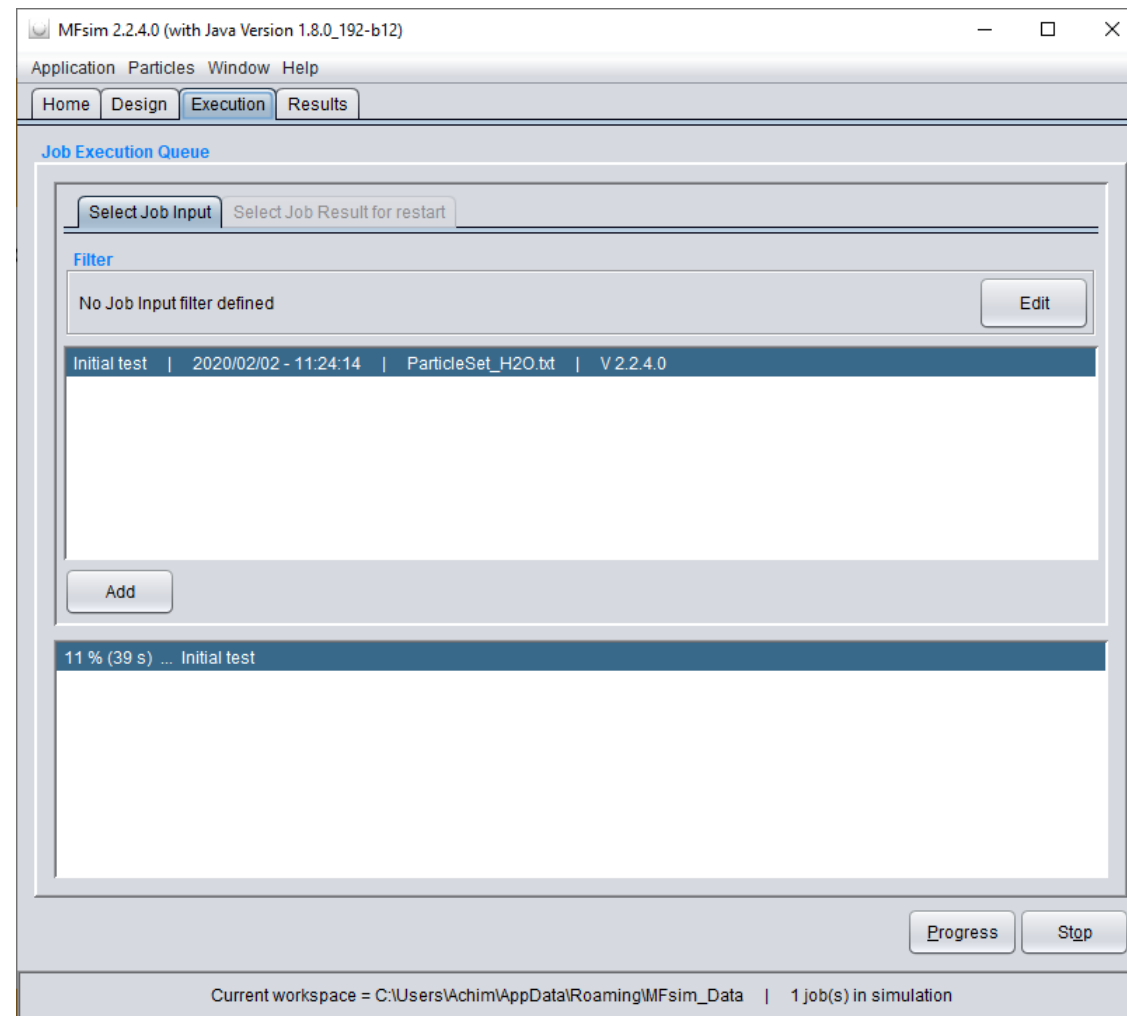
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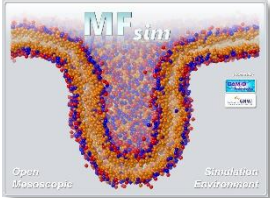
Start job execution (simulation) and wait until the simulation is finished.

Job Execution



Job Result Inspection

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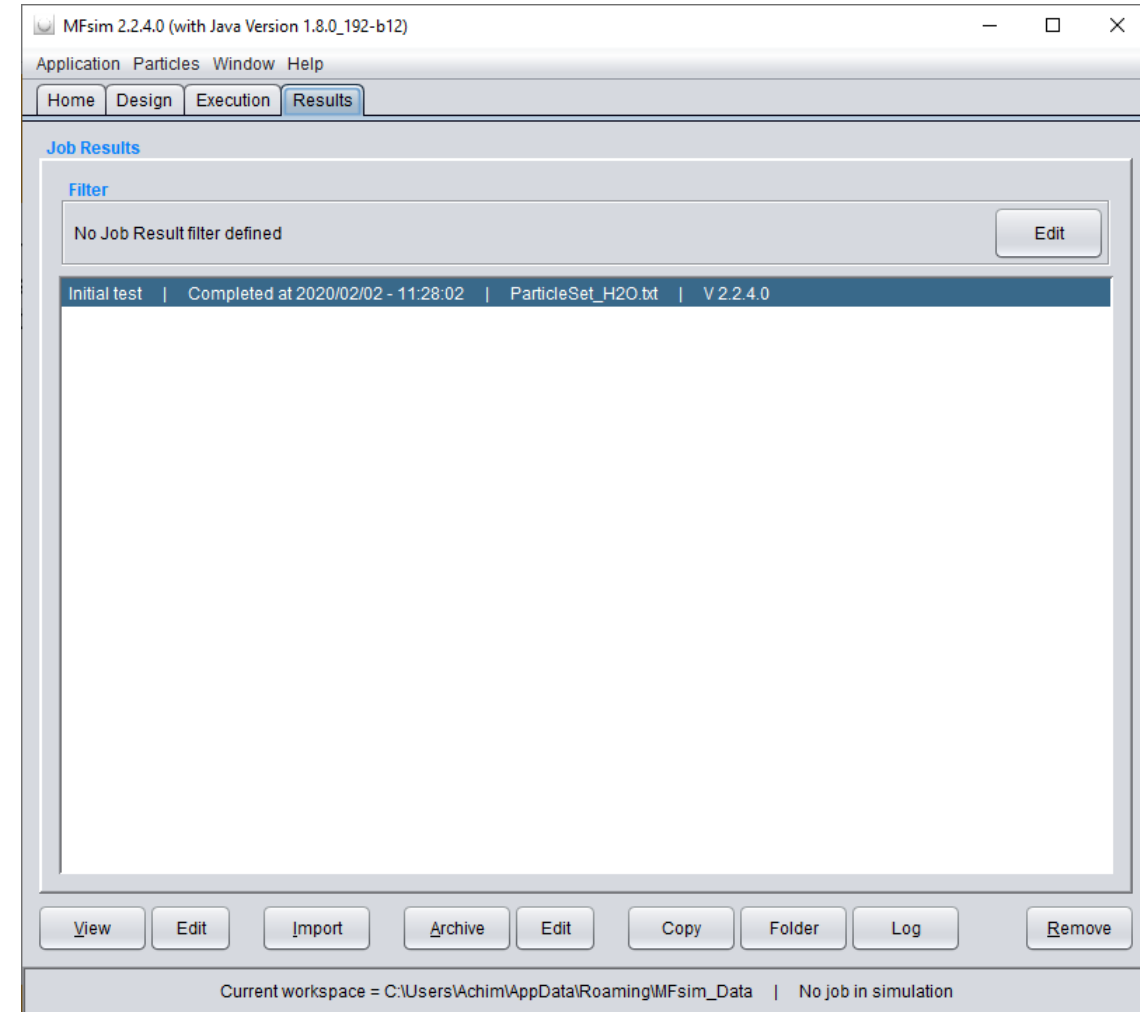


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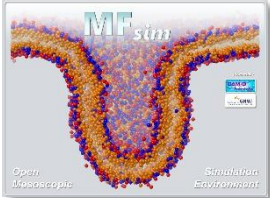
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Select the **Results** tab that now contains the (successfully *Completed*) Job Result. Hit the **View** button ...



Job Result Inspection

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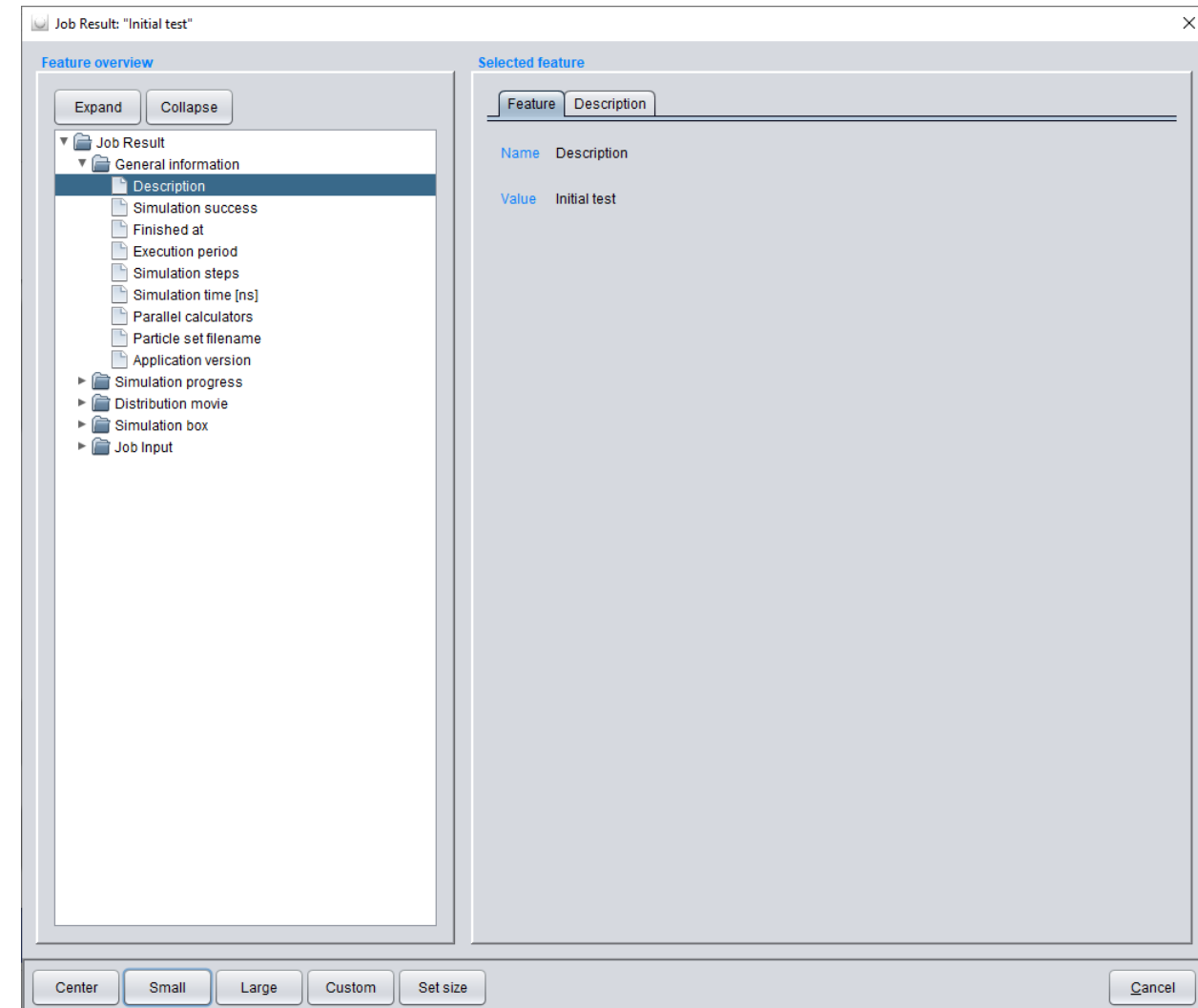


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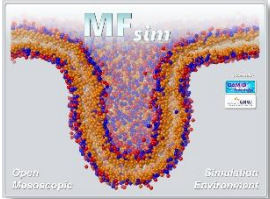
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... to inspect the Job Result features ...



Job Result Inspection

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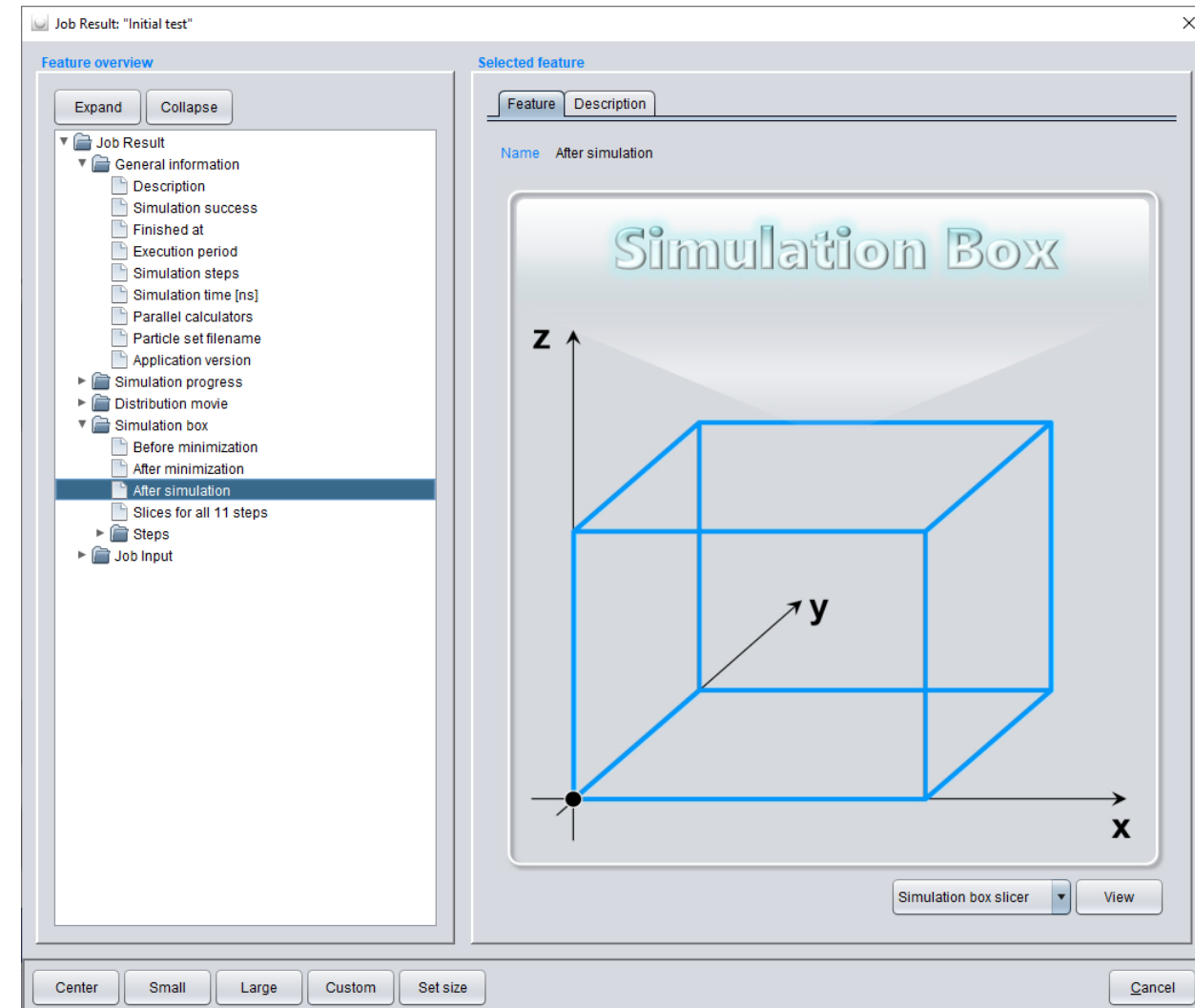


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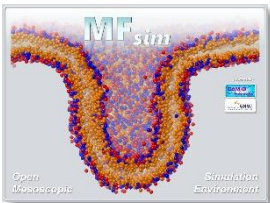
... e.g. **View** the simulation box **After simulation** ...



Job Result Inspection

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... where the initial graphical display may be changed ...



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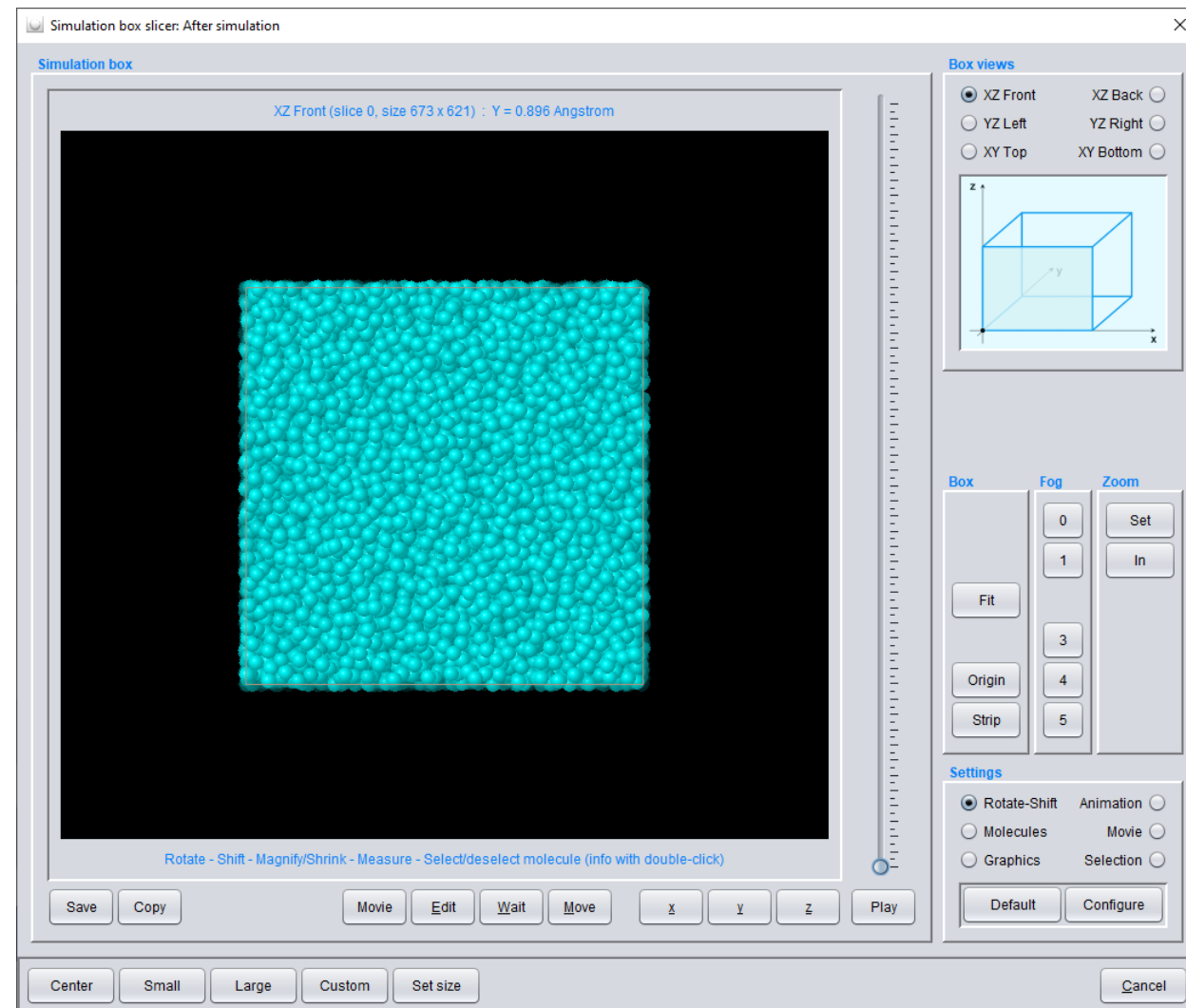


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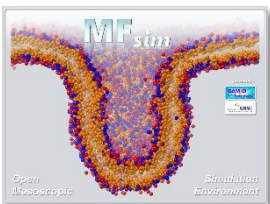
GitHub repository:
<https://github.com/zlelesny/MFsim>



Job Result Inspection

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... to a more appealing one (not explained in this tutorial – but you may just play & explore ...). Return to the *Results* tab by cancelling all modal dialogs with the *Cancel* button.



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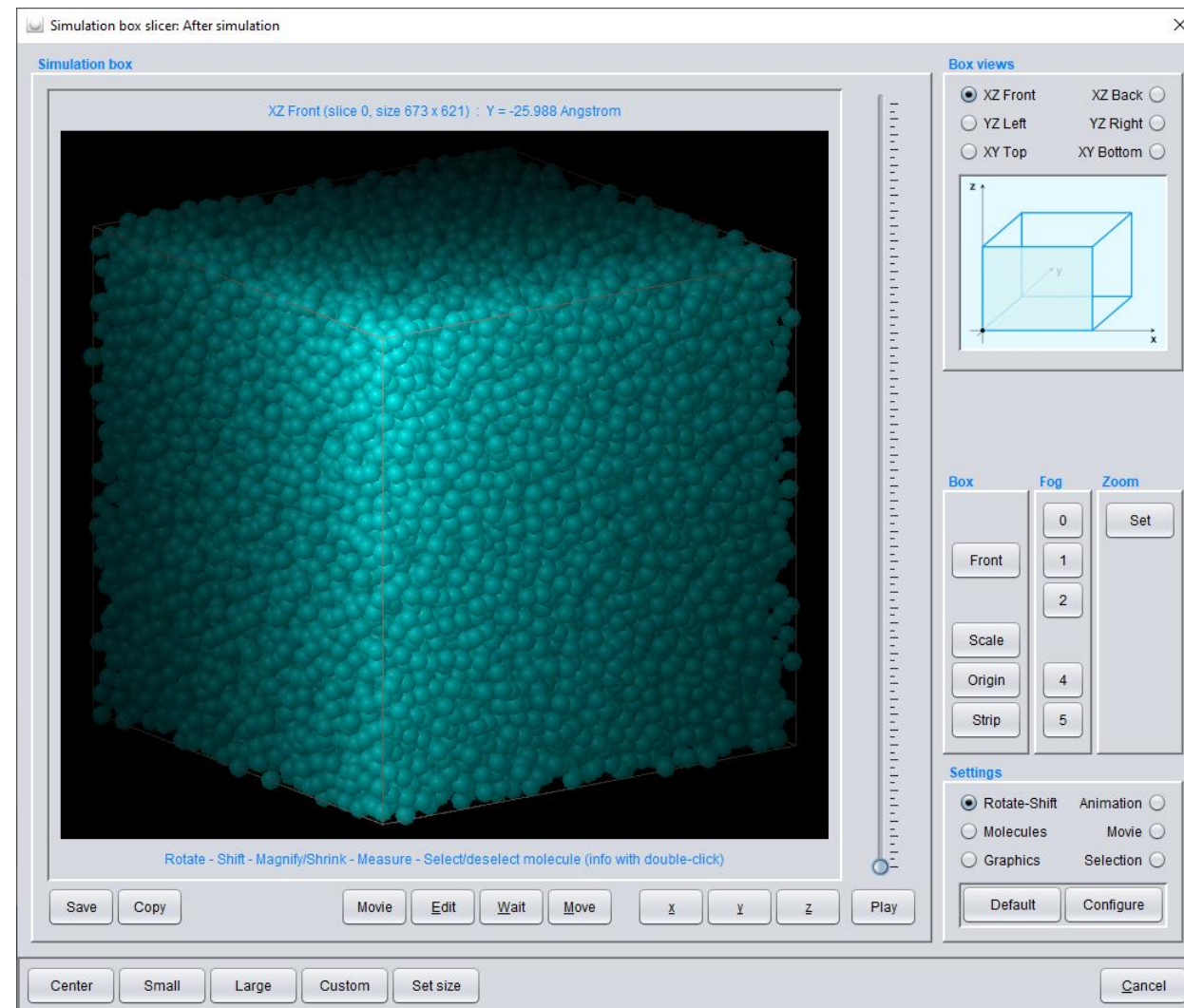


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GitHub repository:
<https://github.com/zielezny/MFsim>

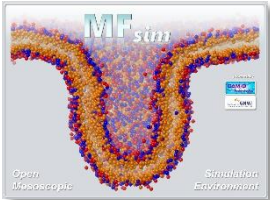
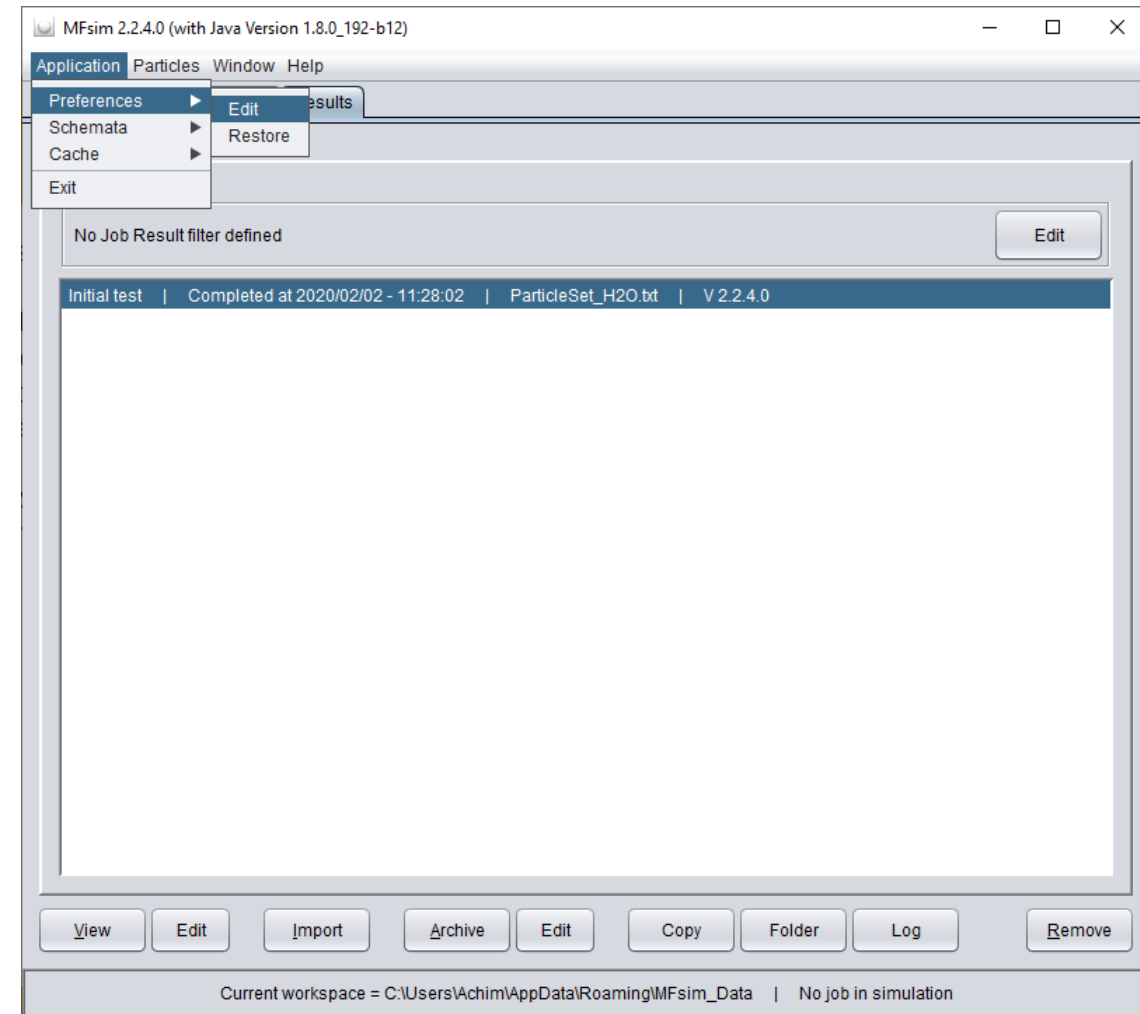


Preferences

MFsim is initialized with numerous preference settings that may be changed with **Application/Preferences/Edit**.

The default preference settings may not adequately exploit a specific computer hardware thus the performance of MFsim may be considerably enhanced by an appropriate choice of e.g. parallelization or graphics settings (see corresponding tutorials).

Exit the application via menu item **Application/Exit** or simply close the window.



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