

# **Introduction to OpenPathSampling: Overview and Usage**

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Tools from the talk: [https://gitlab.e-cam2020.eu/dwhswenson/esdw\\_1\\_materials](https://gitlab.e-cam2020.eu/dwhswenson/esdw_1_materials)

# OpenPathSampling Toolchain

## **Python:**

setuptools: installation tools  
nose: unit testing

## **Scientific Python:**

numpy: basic numerics (e.g., math on arrays)  
scipy: more advanced numerics (optimization, linear algebra)  
pandas: tables, series  
matplotlib: visualization  
jupyter: interactive notebooks  
netcdf4: data storage

## **Omnia:**

openmm: MD simulation  
mdtraj: trajectory analysis package  
openmmtools: additional OpenMM-based tools