

# Windows 上安装 QuTiP

## 安装 Anaconda

- 安装 Anaconda: <https://www.anaconda.com/download/success>
- 添加环境变量 (Win10, 假设 Anaconda 安装在 D 盘) :

此电脑 → 属性 → 高级系统设置 → 环境变量 → 双击 Path → 弹出“编辑环境变量”窗口, 新建, 依次键入:

```
D:\Anaconda
D:\Anaconda\Scripts
D:\Anaconda\Library\mingw-w64\bin
D:\Anaconda\Library\bin
```

“编辑环境变量”窗口确定 → “环境”窗口确定

## qutip 环境配置

问你要不要下载的, 一律 yes

- 打开 Anaconda Powershell Prompt
- 依次键入:

```
conda create -n qutip-env python=3.12
```

```
conda activate qutip-env
```

```
conda install conda-forge::qutip
```

ps: 官网上的 `conda create -n qutip-env python qutip` 可能不行

pps: 若需要其他库可通过 `conda install` 下载

ppps: 别用中国电信的 WIFI

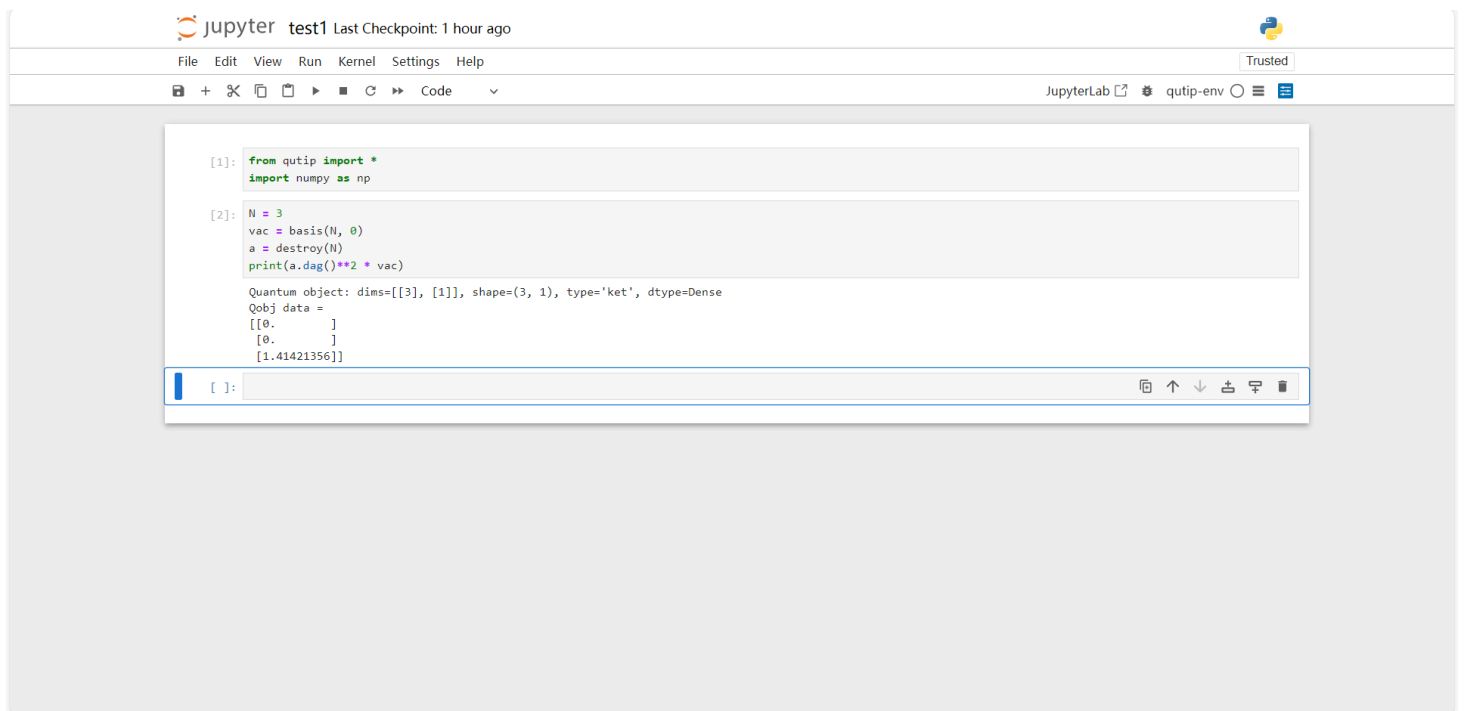
```
conda install ipykernel
```

```
python -m ipykernel install --user --name qutip-env --display-name "qutip-env"
```

- 打开 Jupyter Notebook, 将 Kernel 选为我们配置好的环境 qutip-env

## 写代码

现在可以在 Jupyter Notebook 中写代码了。写完后 Shift+Enter 运行代码, 效果如下:



The screenshot shows a Jupyter Notebook window titled "test1" with a "Trusted" status. The interface includes a menu bar (File, Edit, View, Run, Kernel, Settings, Help) and a toolbar with icons for saving, undo, redo, and running code. The first code cell contains the following code:

```
[1]: from qutip import *
import numpy as np
```

The second code cell contains the following code:

```
[2]: N = 3
vac = basis(N, 0)
a = destroy(N)
print(a.dag()**2 * vac)
```

The output of the second cell is displayed below the code:

```
Quantum object: dims=[[3], [1]], shape=(3, 1), type='ket', dtype=Dense
Qobj data =
[[0.      ]
 [0.      ]
 [1.41421356]]
```

At the bottom of the notebook, there is an input field for a new code cell, currently showing "[ ]:", and a toolbar with icons for running, undo, redo, and other actions.