• **Dry Lab Experiments**

![Dry Lab Experiment](image)

A dry lab is a laboratory where computational or applied mathematical analyses are done on a computer-generated model to simulate a phenomenon in the physical realm. Examples of such phenomena include a molecule changing quantum states, the event horizon of a black hole or anything that otherwise might be impossible or too dangerous to observe under normal laboratory conditions. This term may also refer to a lab that uses primarily electronic equipment, for example, a robotics lab.

- 1: ab initio Calculations - Atomic Energetics (Dry Lab)
- 2: ab initio Calculations - Diatomic Molecular Orbitals (Dry Lab)
- 3: ab initio Calculations - Dihydrogen Potential Curve (Dry Lab)
- 4: ab initio Calculations - Electron-Electron Repulsion (Dry Lab)
- Exercise I: Structure and Electronic Energy of a Small Molecule
- Simulation: Probabilistic Interpretation of Atomic Orbitals (Dry Lab)

• **Wet Lab Experiments**

![Wet Lab Experiment](image)

Wet laboratories are laboratories where chemicals, drugs, or other material or biological matter are handled in liquid solutions or volatile phases, requiring direct ventilation, and specialized piped utilities (typically water and various gases).

- General Chemistry Labs
- Organic Chemistry Labs
- Analytical Chemistry Labs