

SubAtomic Physics

Nuclear Physics

- Understand the Atomic Nucleus in terms of the interaction of **Protons** and **Neutrons**.
- An enormously important subject; both in order to understand matter on Earth and in Stars and the Universe, and for technological reasons

Particle Physics/High Energy Physics

- Understand Reality at its most Basic Level

• Experiment



• Theory

Constituents
Interactions

Why these Constituents and Interactions?
Why this Space-Time

Micro Level \longleftrightarrow **Macro Level** \longrightarrow **History of Cosmos**