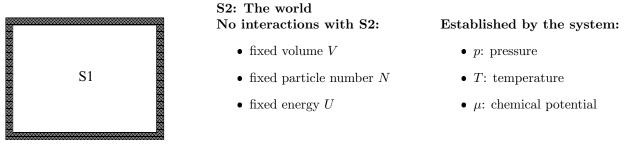
3.14 Thermodynamic Contacts: The isolated system



heat isolation

Thermodynamic equilibrium: no changes in time \Rightarrow State(V, N, U)

Example: two kinds of atoms: N_A, N_B in an isolated closed chamber; chemical reactions are allowed, e.g. $2A \rightarrow B$ μ_A, μ_B, p, T will change as a function of time.

More examples: • the universe

• our sun system