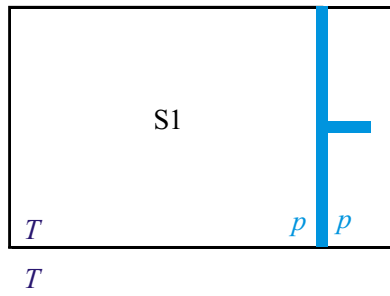## 1.10 Thermodynamic Contacts: Temperature and pressure are defined by the surrounding area

S2: The world, a heat bath, ...
Exchange of heat energy ΔQ and pressure work ΔW

- T_1
- p_1
- fixed particle number N

Controlled by the system:

- V: volume
- μ: chemical potential
- S: entropy

$\Rightarrow \text{State}(p, N, T)$

Examples:
- Gas a fixed pressure
- Chemical reactions in an open chamber cooled in a heat bath