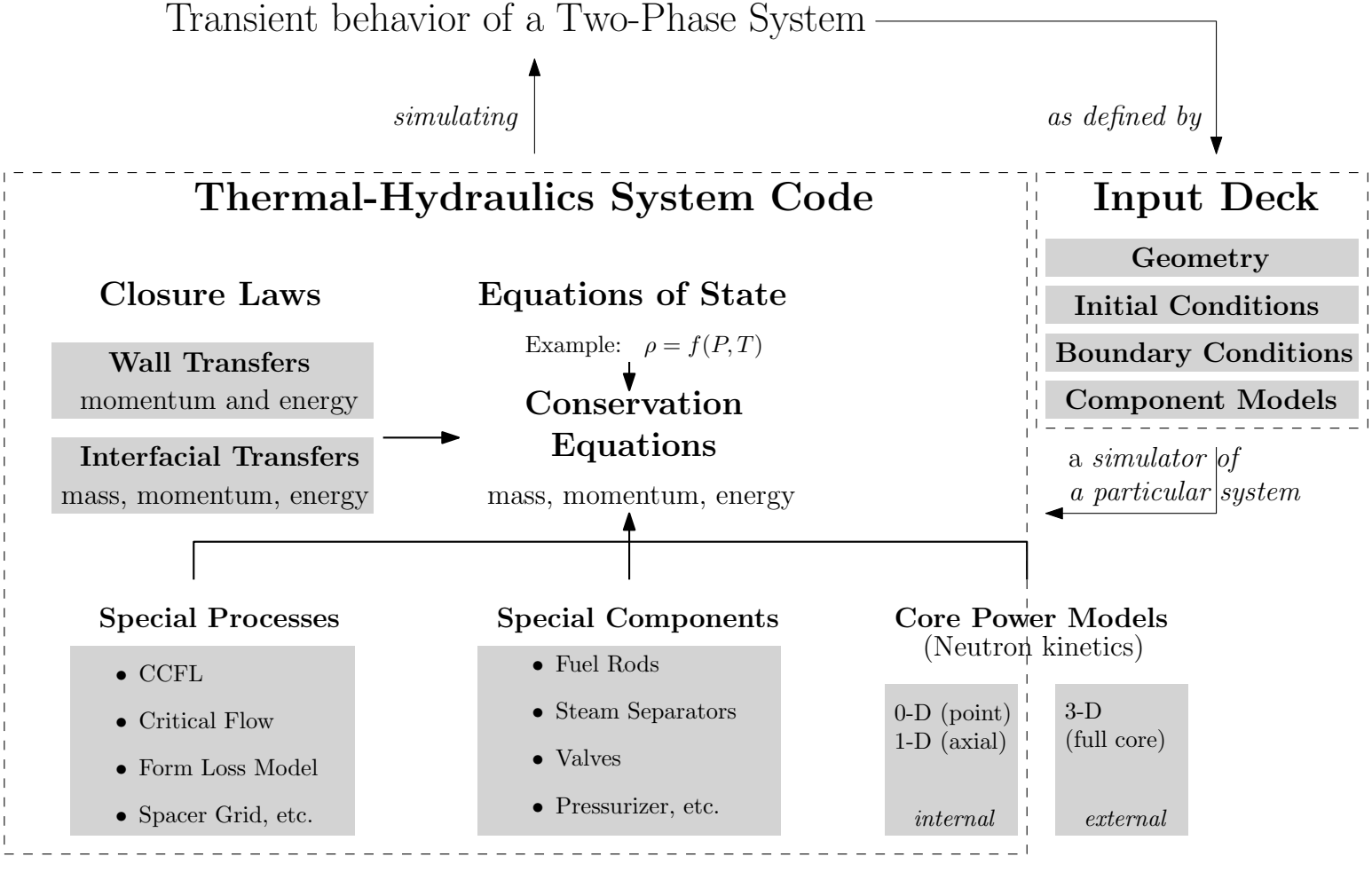
Transient behavior of a Two-Phase System
simulating
as defined by
Thermal-Hydraulics System Code
Input Deck
Geometry
Initial Conditions
Boundary Conditions
Component Models
Closure Laws
Wall Transfers
momentum and energy
Interfacial Transfers
mass, momentum, energy
Equations of State
Example: $\rho = f(P,T)$
Conservation Equations
mass, momentum, energy
a simulator of a particular system
Special Processes
• CCFL
• Critical Flow
• Form Loss Model
• Spacer Grid, etc.
Special Components
• Fuel Rods
• Steam Separators
• Valves
• Pressurizer, etc.
Core Power Models
(Neutron kinetics)
0-D (point)
1-D (axial)
internal
3-D
(full core)
external