Exponential convergence class

(a) *frozen kernel dynamics*

$S_E = \Omega$

(b) *frozen error dynamics*

$S_K = \Omega$

(c) *mixed-frozen dynamics*

S_E S_K

Polynomial convergence class

(d) *critical point*

$S_E = S_K = \Omega$
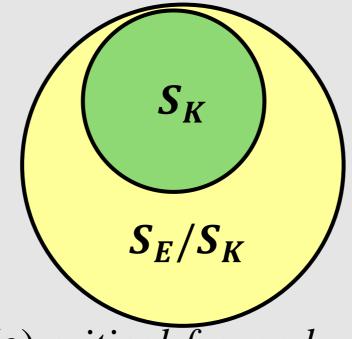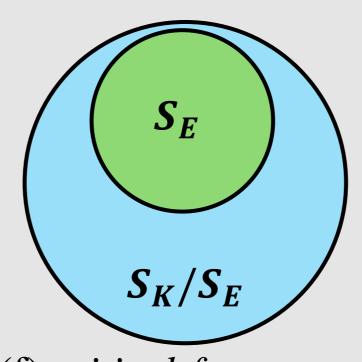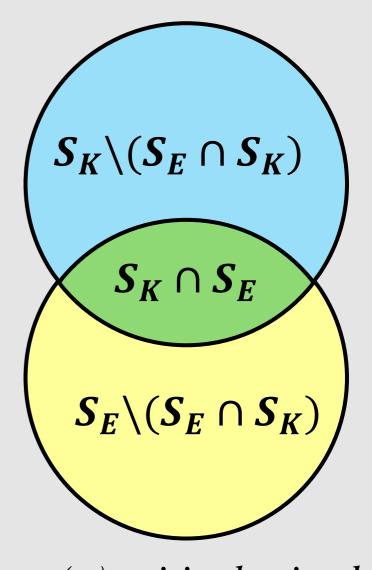
(e) *critical-frozen-kernel dynamics*

S_K
S_E/S_K

(f) *critical-frozen-error dynamics*

S_E
S_K/S_E

(g) *critical-mixed-frozen dynamics*

$S_K \backslash (S_E \cap S_K)$
$S_K \cap S_E$
$S_E \backslash (S_E \cap S_K)$

$y_\beta, \beta \in S_K$ $y_\beta, \beta \in S_E$ $y_\beta, \beta \in S_K$

$O_{\min}$ $O_{\max}$ Target value