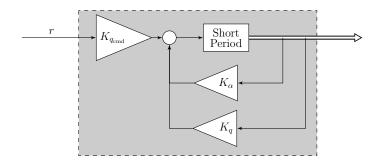
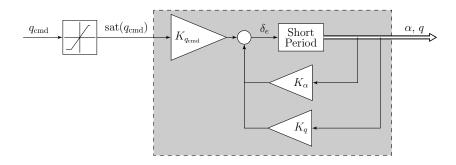
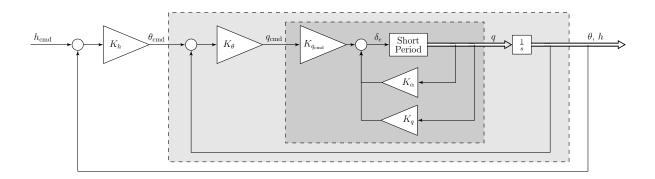
baseline.tex



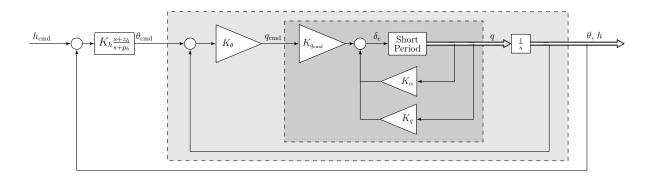
baseline-input-sat.tex



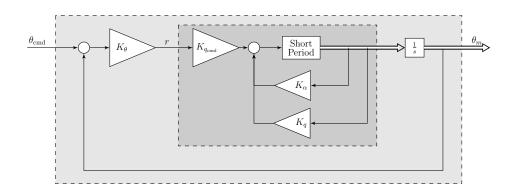
guidance-loop-1.tex



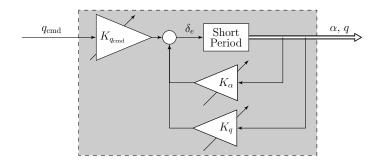
guidance-loop-2.tex



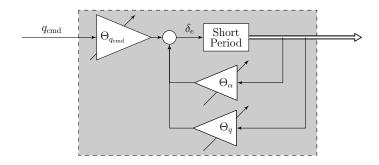
guidance-loop-3.tex



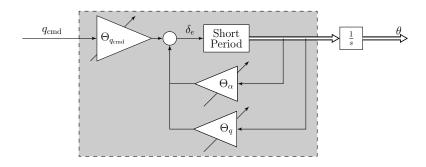
adaptive-1.tex



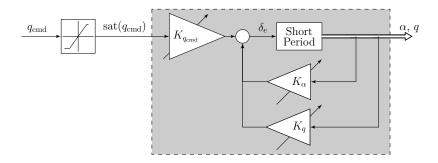
adaptive-2.tex



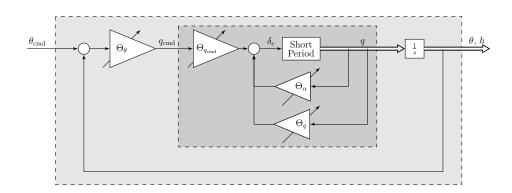
adaptive-3.tex



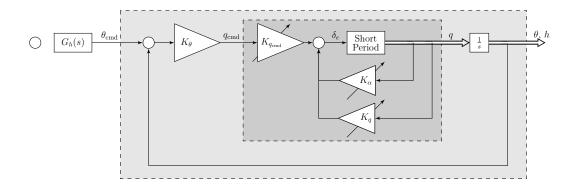
adaptive-4.tex



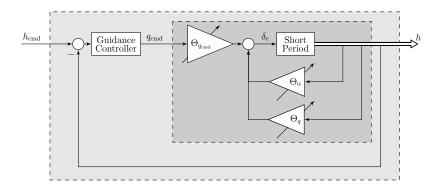
adaptive-5.tex



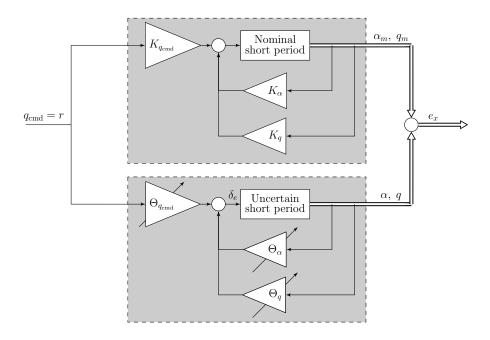
adaptive-6.tex



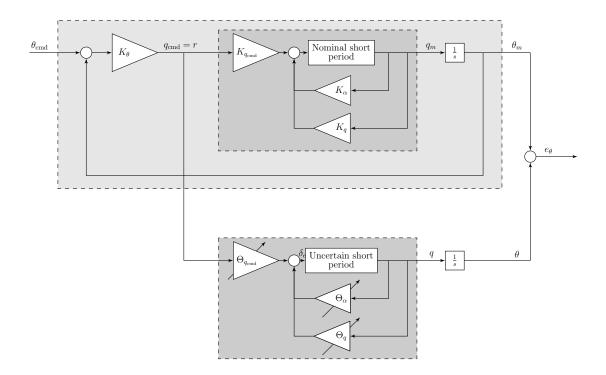
block-001.tex



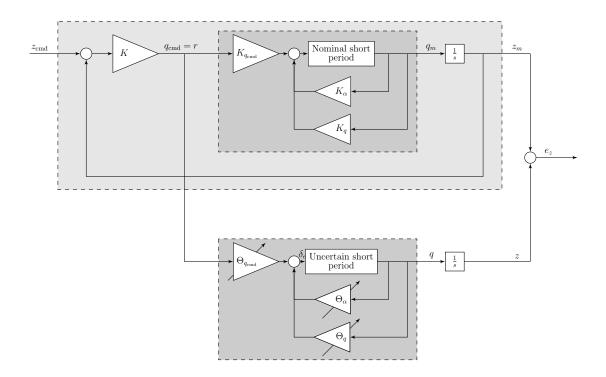
reference-adaptive-1.tex



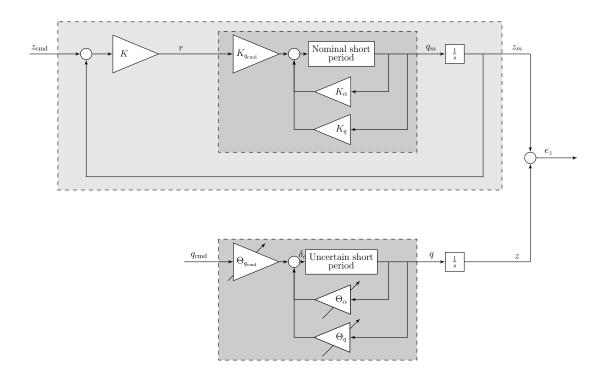
adaptive-pitch-loop-1.tex



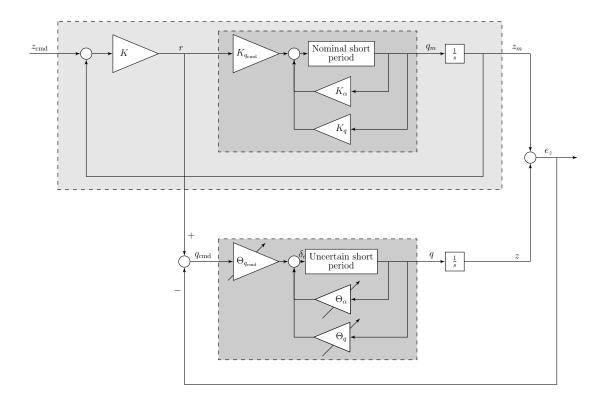
using-z-1.tex



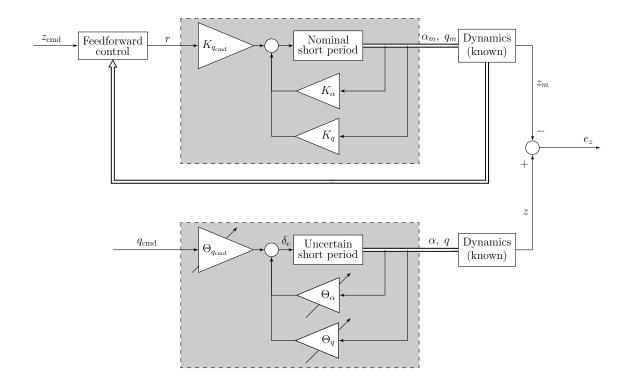
new-structure-1.tex



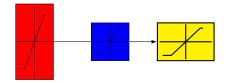
pitch-rate-feedback-1.tex



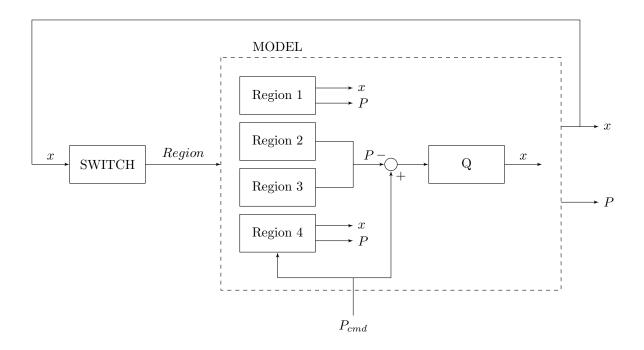
altitude-control-1.tex



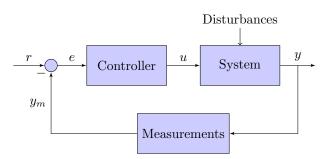
colored-satnode.tex



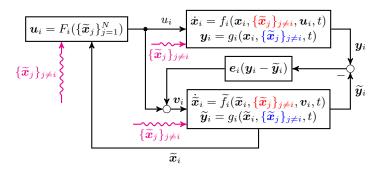
multiblock-1.tex



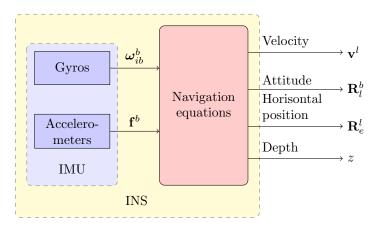
blue-block-1.tex



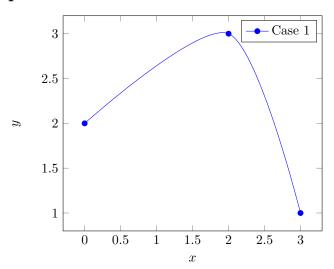
demo-block-1.tex



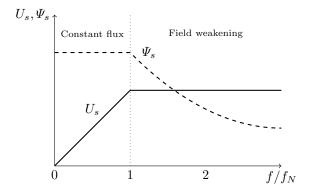
demo-block-2.tex



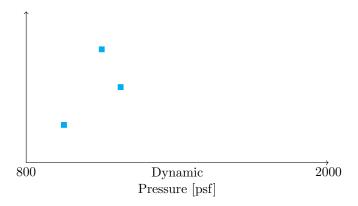
plot-1.tex



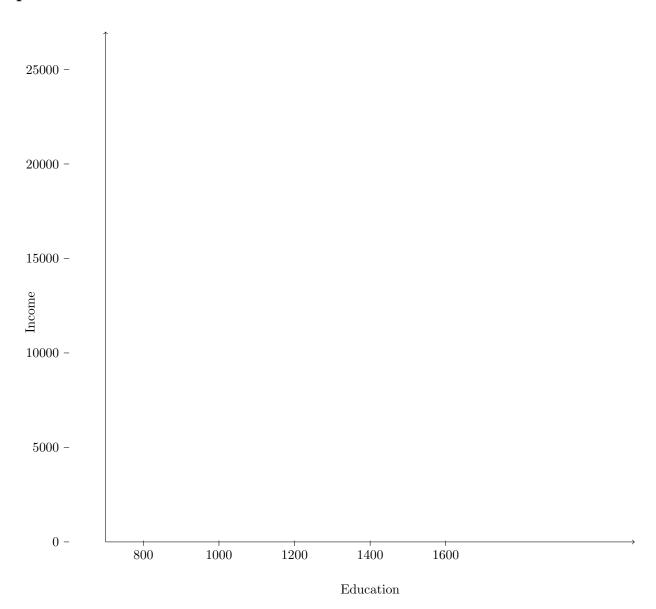
plot-2.tex



plot-3.tex



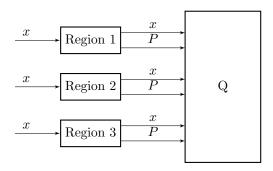
plot-4.tex



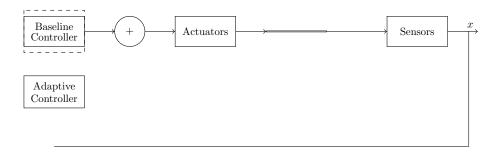
empty-matrix.tex

Force Equation		

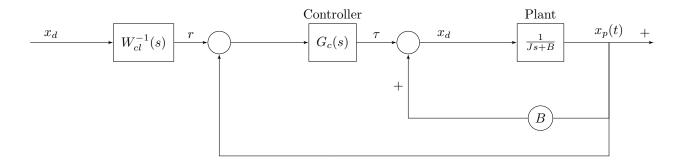
block-002.tex



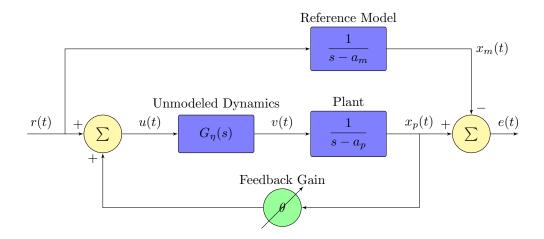
${\bf controller\text{-}block\text{-}1.tex}$



controller-block-2.tex



${\bf controller\text{-}block\text{-}3.tex}$



${\it general-mimo-diagram-1.tex}$

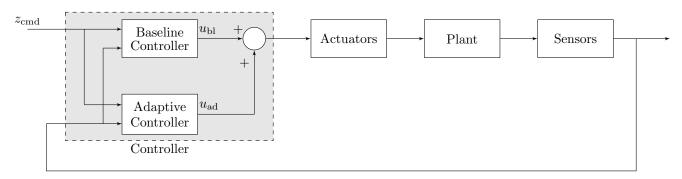


Figure 1: General MIMO feedback control block diagram

base line-plus-adaptive-1. tex

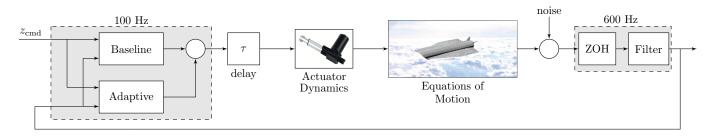


Figure 2: Baseline plus adaptive control block diagram

base line-plus-adaptive-2. tex

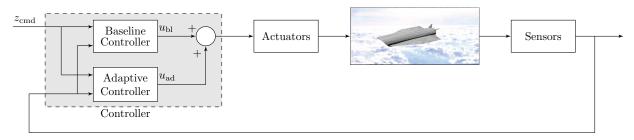


Figure 3: Baseline plus adaptive control block diagram

${\it classical-mrac-1.tex}$

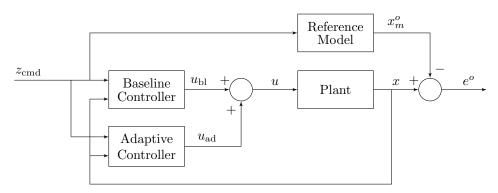


Figure 4: Classical model-reference adaptive control architecture

${\bf classical\text{-}mrac\text{-}2.tex}$

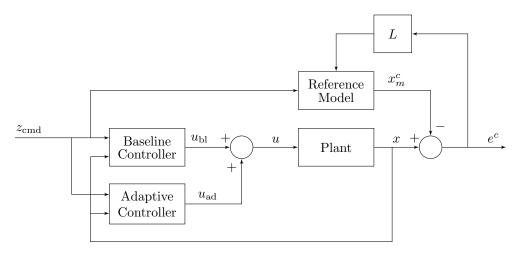
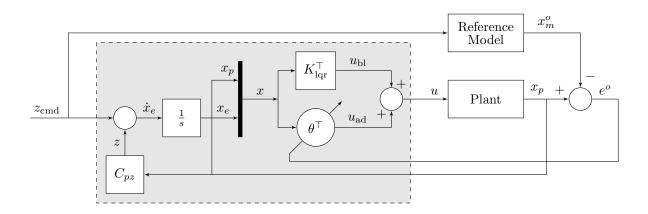
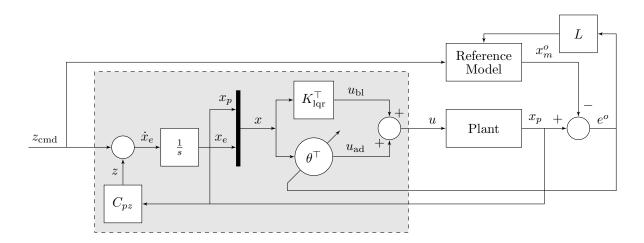


Figure 5: Closed loop reference model adaptive control architecture $\,$

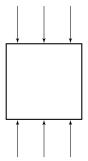
block-003.tex



block-004.tex



block-005.tex



block-006.tex

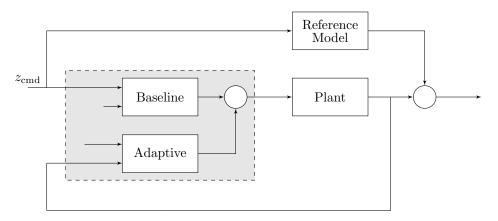


Figure 6: Classical open loop reference model adaptive control architecture

block-007.tex

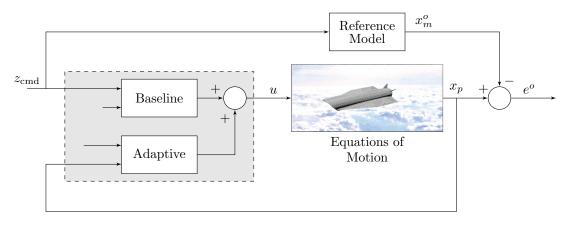


Figure 7: Classical open loop reference model adaptive control architecture

block-008.tex

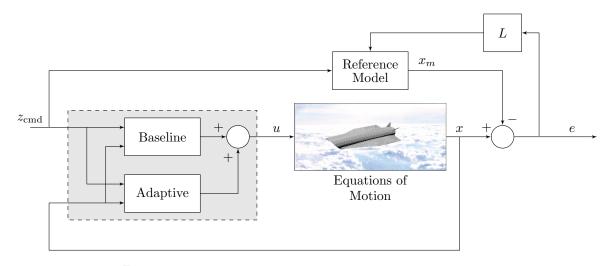


Figure 8: Closed-loop reference model adaptive control architecture

block-009.tex

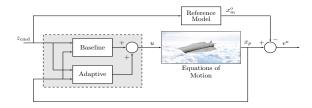


Figure 9: Classical open loop reference model adaptive control architecture

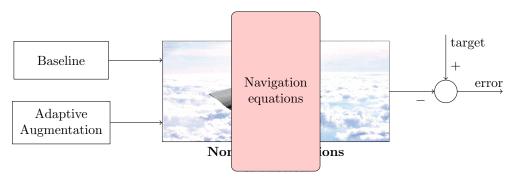
block-010.tex

 $A,B\Lambda,C$

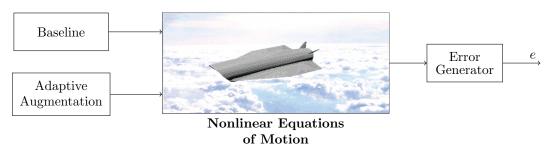


GHV Equations of Motion

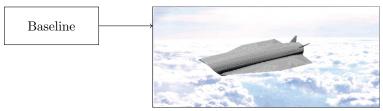
example-3.tex



example-3b.tex

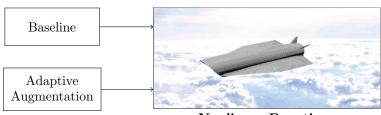


example-3c.tex



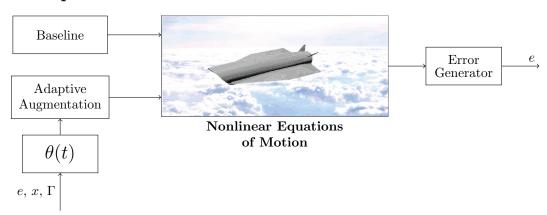
Nonlinear Equations of Motion

example-3d.tex



Nonlinear Equations of Motion

example-4.tex



block-011.tex

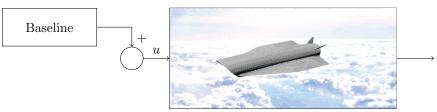


block-012.tex



Nonlinear Equations of Motion

block-013.tex



Nonlinear Equations of Motion

block-014.tex

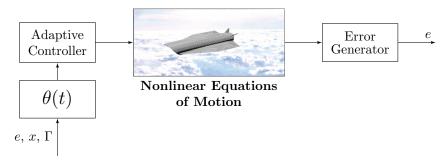
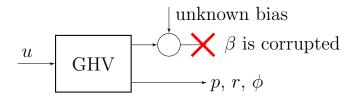
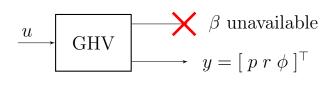


Figure 10: Baseline plus adaptive control block diagram

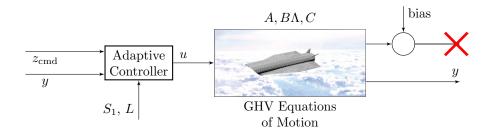
block-015.tex



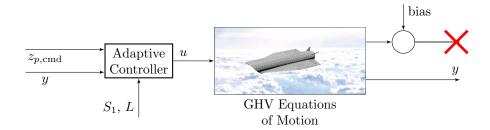
block-016.tex



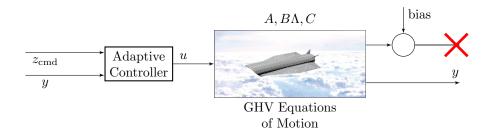
block-017.tex



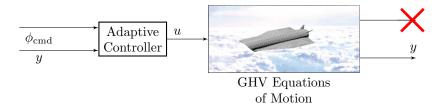
block-018.tex



block-019.tex



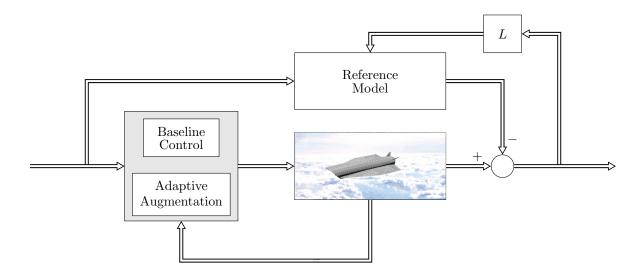
block-020.tex



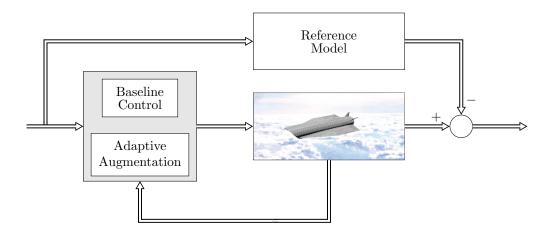
block-021.tex



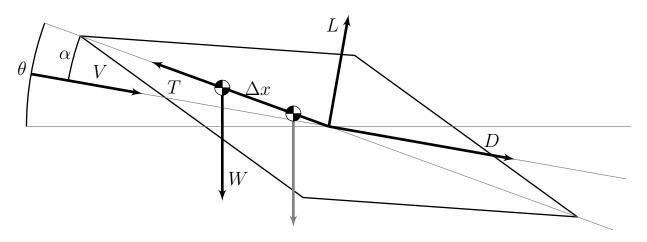
block-022.tex



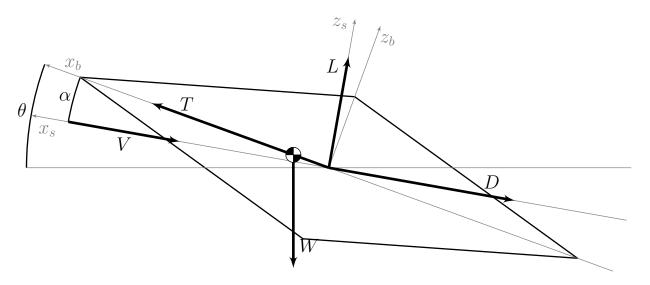
block-023.tex



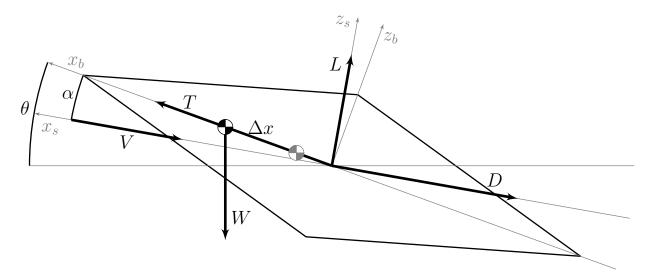
hypersonic-cross-section-1.tex



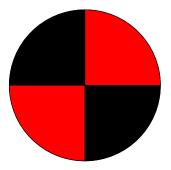
hypersonic-cross-section-2.tex



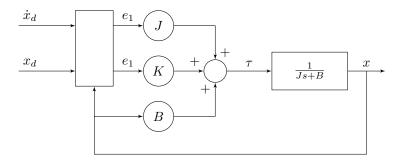
hypersonic-cross-section-3.tex



cg-circle.tex



block-024.tex



${\bf block\text{-}025.tex}$

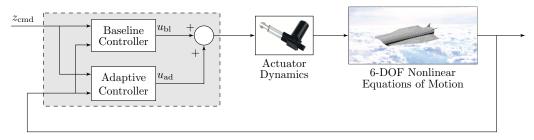
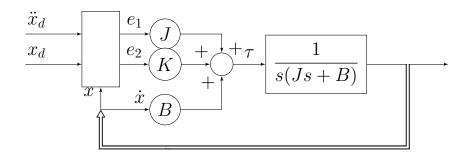
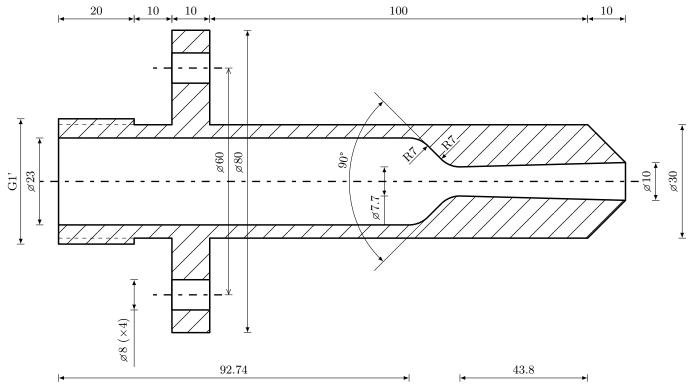


Figure 11: Baseline plus adaptive control block diagram

block-026.tex

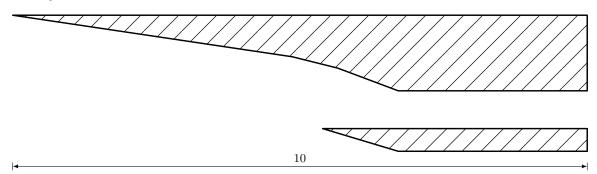


nozzle.tex

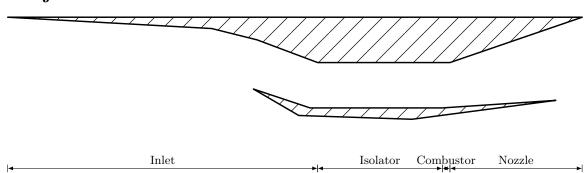


All dimensions are in millimeters

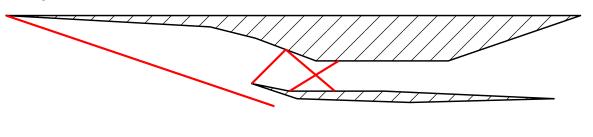
ramjet-0.tex



ramjet-1.tex

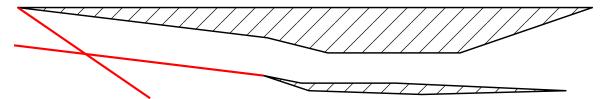


ramjet-2.tex



Inlet Isolator Combustor Nozzle

ramjet-3.tex



brayton-ideal.tex

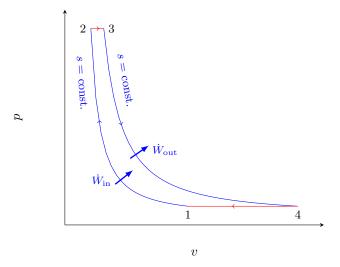


Figure 12: Ideal Brayton cycle

brayton-pv.tex

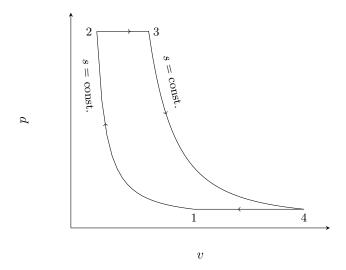
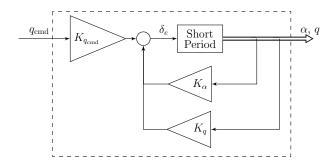
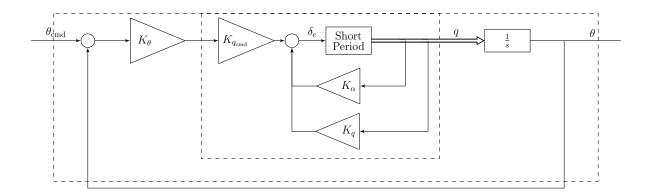


Figure 13: Ideal Brayton cycle P-v Diagram

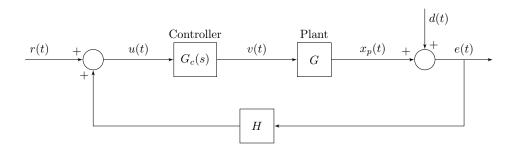
block-027.tex



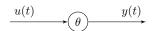
block-028.tex



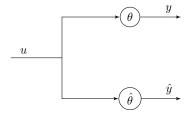
block-029.tex



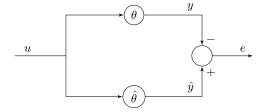
block-030.tex



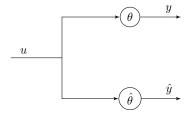
block-031.tex



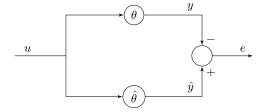
block-032.tex



block-033.tex



block-034.tex



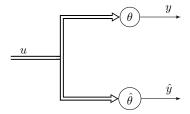
block-035.tex



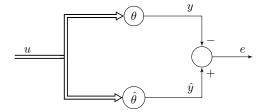
block-036.tex



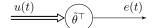
block-037.tex



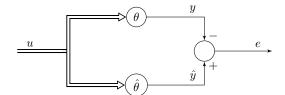
block-038.tex



block-039.tex



block-040.tex



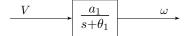
block-041.tex



block-042.tex



block-043.tex



block-044.tex



block-045.tex



block-046.tex



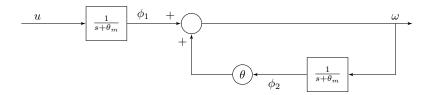
block-047.tex



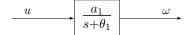
block-048.tex



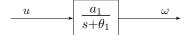
block-049.tex



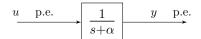
block-050.tex



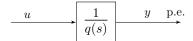
block-051.tex



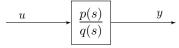
block-052.tex



block-053.tex



block-054.tex

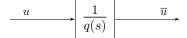


p(s) q(s) Hurwitz proper t.f.

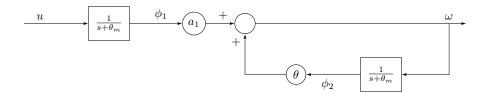
block-055.tex

$$\dot{x} = Ax + bu \Longrightarrow$$

block-056.tex



block-057.tex



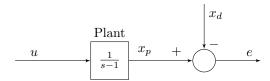
block-058.tex



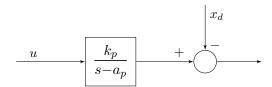
block-059.tex



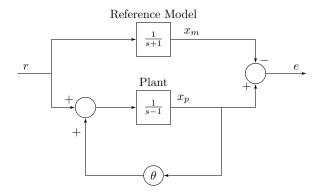
block-060.tex



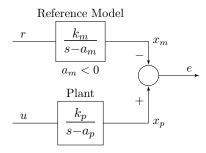
block-061.tex



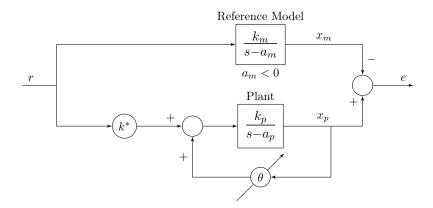
block-062.tex



block-063.tex



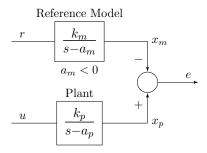
block-064.tex



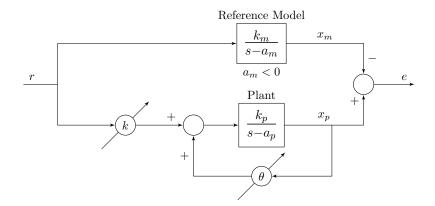
block-065.tex



block-066.tex



block-067.tex



block-068.tex

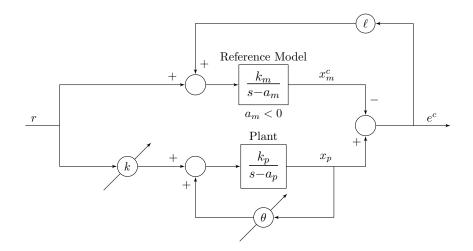


${\bf block\text{-}069.tex}$

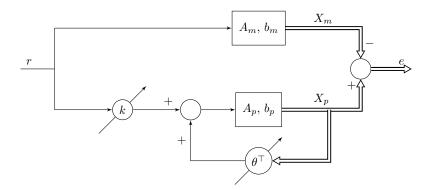


Figure 14: $lec2\ fig$ 13 and $lec3\ fig$ 1

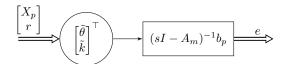
block-070.tex



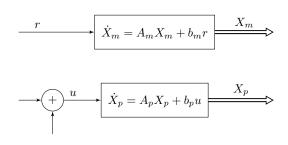
block-071.tex



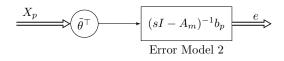
block-072.tex



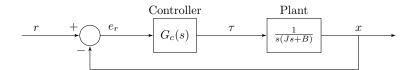
block-073.tex



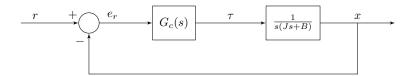
block-074.tex



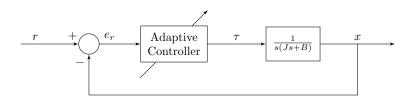
block-075.tex



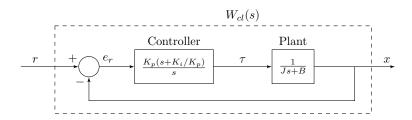
block-076.tex



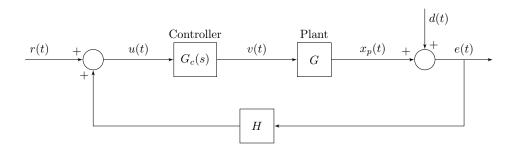
block-077.tex



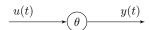
block-078.tex



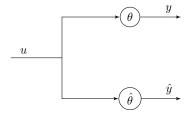
block-079.tex



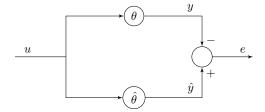
block-080.tex



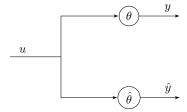
block-081.tex



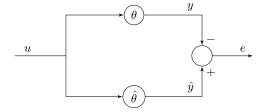
block-082.tex



block-083.tex



block-084.tex



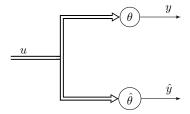
block-085.tex



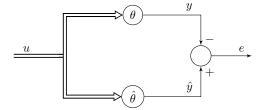
block-086.tex



block-087.tex



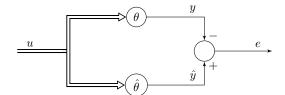
block-088.tex



block-089.tex



block-090.tex



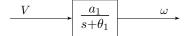
block-091.tex



block-092.tex



block-093.tex



block-094.tex



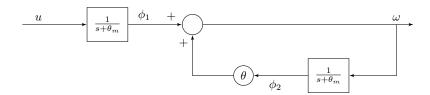
block-095.tex



block-096.tex



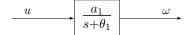
block-097.tex



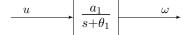
block-098.tex



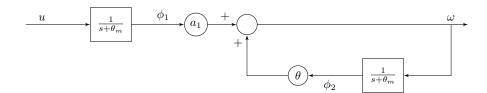
block-099.tex



block-100.tex



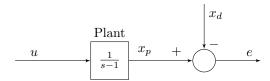
block-101.tex



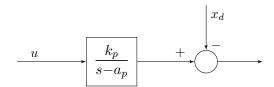
block-102.tex



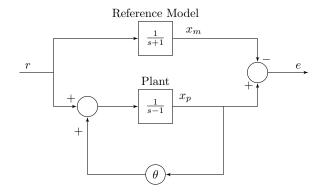
block-103.tex



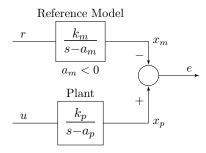
block-104.tex



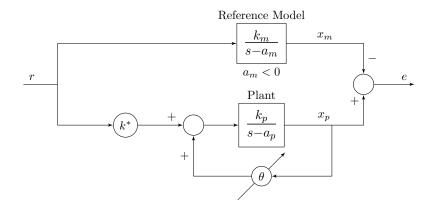
block-105.tex



block-106.tex



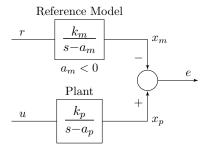
block-107.tex



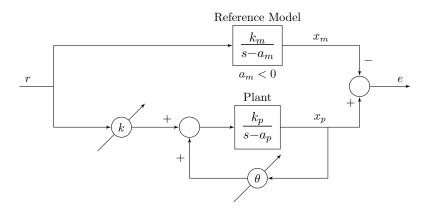
block-108.tex



block-109.tex



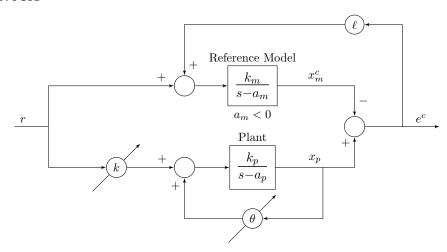
block-110.tex



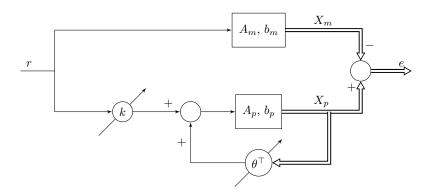
block-111.tex



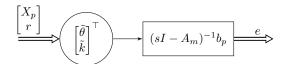
block-112.tex



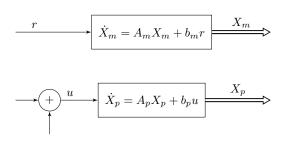
block-113.tex



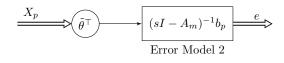
block-114.tex



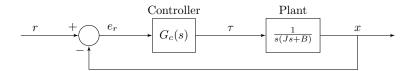
block-115.tex



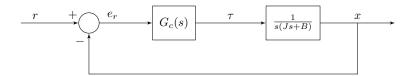
block-116.tex



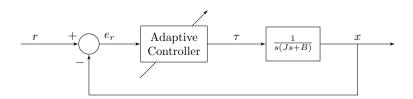
block-117.tex



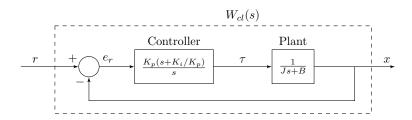
block-118.tex



block-119.tex



block-120.tex



gravity-turn.tex

