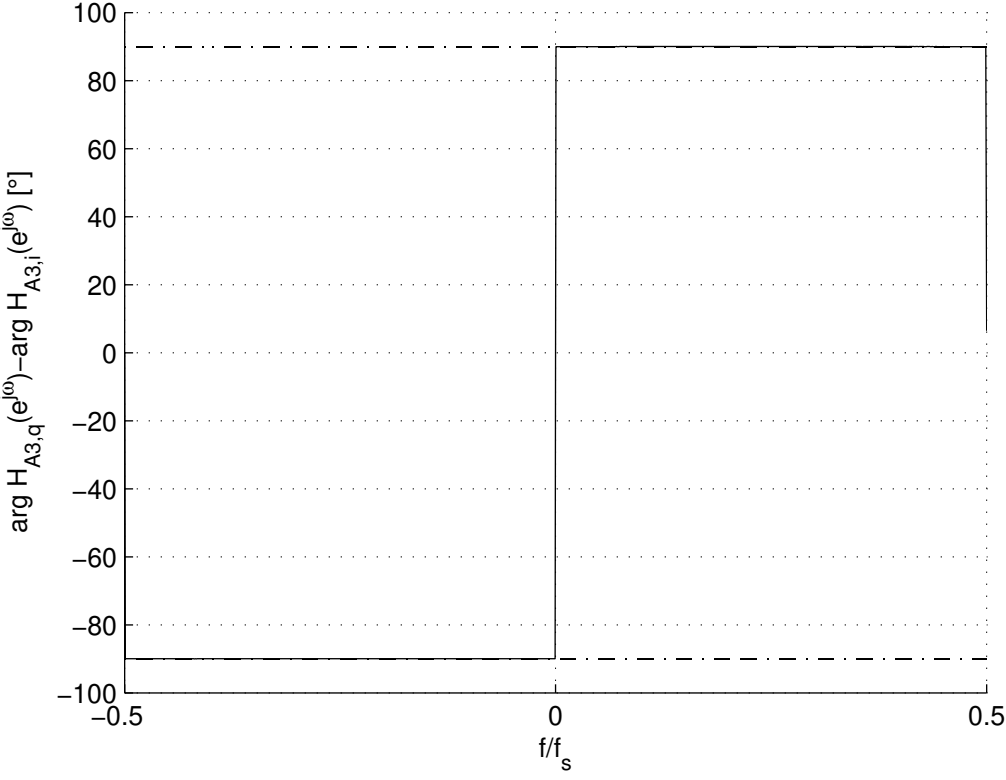
100
80
60
40
20
0
−20
−40
−60
−80
−100
−0.5
0
0.5
f/f_s
arg H_A3,q(e^jω)−arg H_A3,I(e^jω) [°]