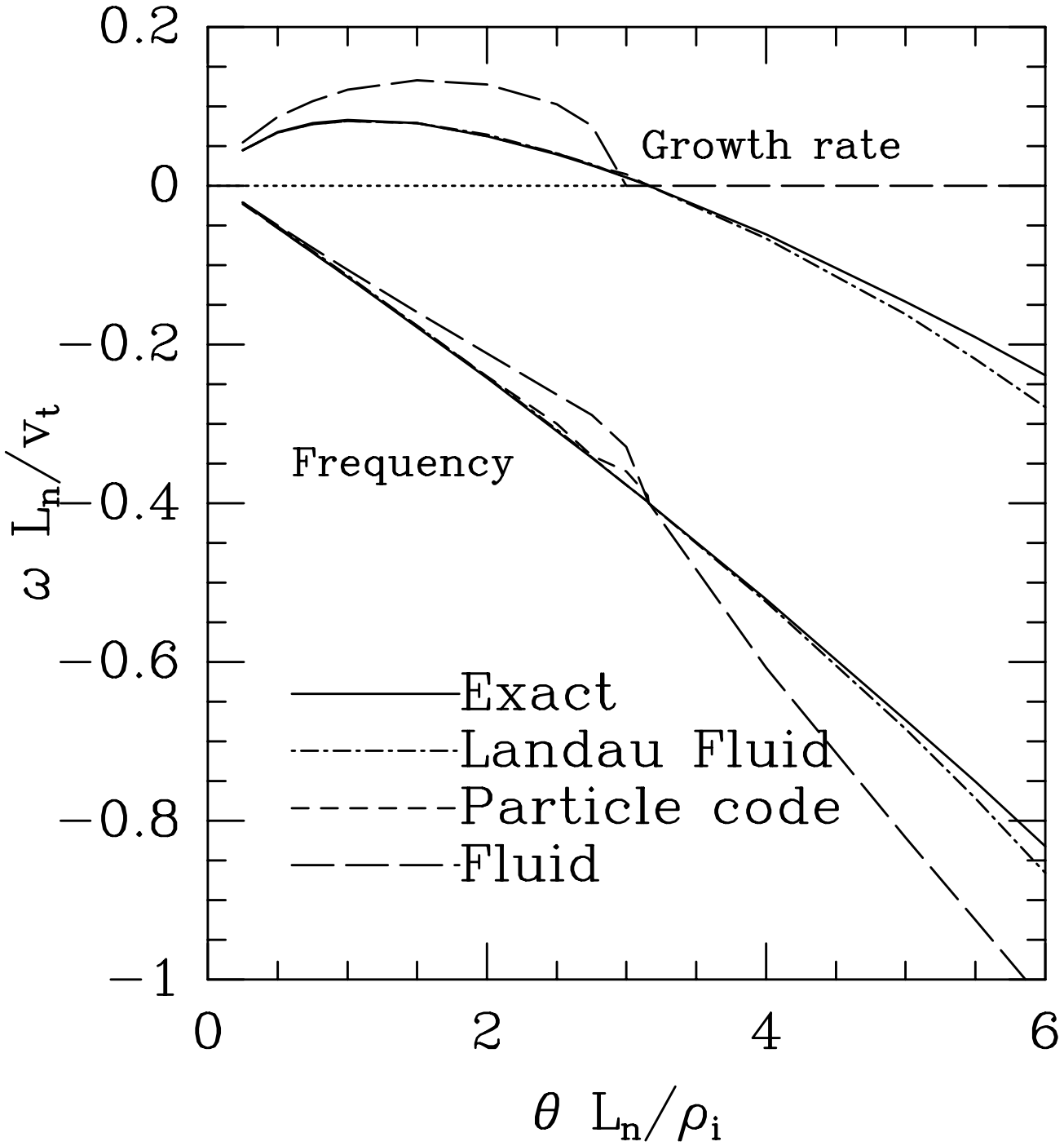
0.2
0
−0.2
−0.4
−0.6
−0.8
−1
0
2
4
6
Growth rate
Frequency
Exact
Landau Fluid
Particle code
Fluid
ω L_n/v_t
θ L_n/ρ_i