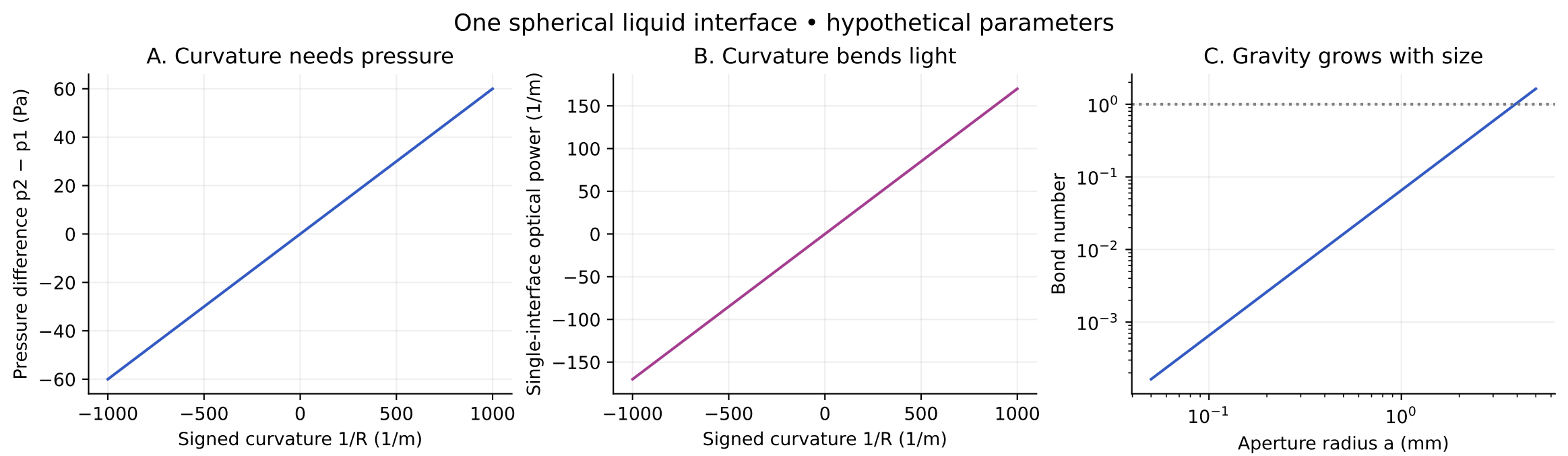

One spherical liquid interface • hypothetical parameters
A. Curvature needs pressure
Pressure difference p2 − p1 (Pa)
60
40
20
0
−20
−40
−60
−1000
−500
0
500
1000
Signed curvature 1/R (1/m)
B. Curvature bends light
Single-interface optical power (1/m)
150
100
50
0
−50
−100
−150
−1000
−500
0
500
1000
Signed curvature 1/R (1/m)
C. Gravity grows with size
Bond number
10^{0}
10^{-1}
10^{-2}
10^{-3}
10^{-1}
10^{0}
Aperture radius a (mm)
Panels A/B: aperture radius 0.05 mm, a/|R| ≤ 0.05. Panel C: scaling only, not a surface-shape solution.