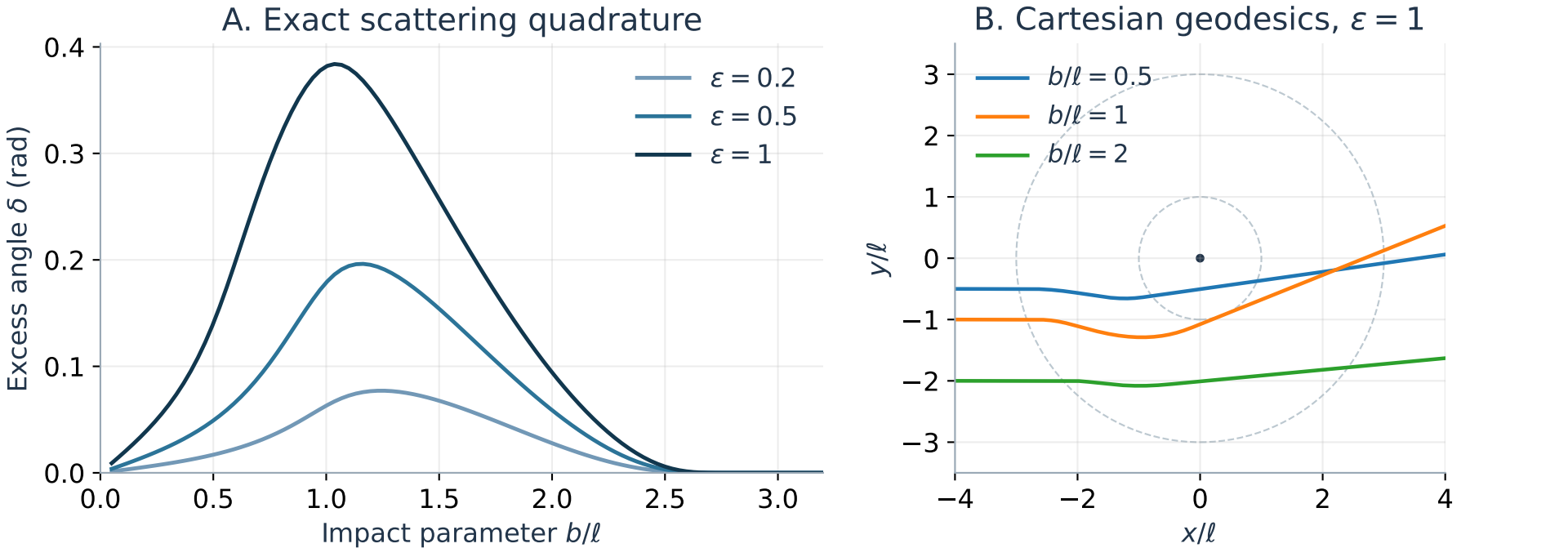
A. Exact scattering quadrature
Excess angle δ (rad)
Impact parameter b/ℓ
$\varepsilon = 0.2$
$\varepsilon = 0.5$
$\varepsilon = 1$
0.0
0.1
0.2
0.3
0.4
0.0
0.5
1.0
1.5
2.0
2.5
3.0
B. Cartesian geodesics, $\varepsilon = 1$
$b/\ell = 0.5$
$b/\ell = 1$
$b/\ell = 2$
y/ℓ
x/ℓ
3
2
1
0
−1
−2
−3
−4
−2
0
2
4