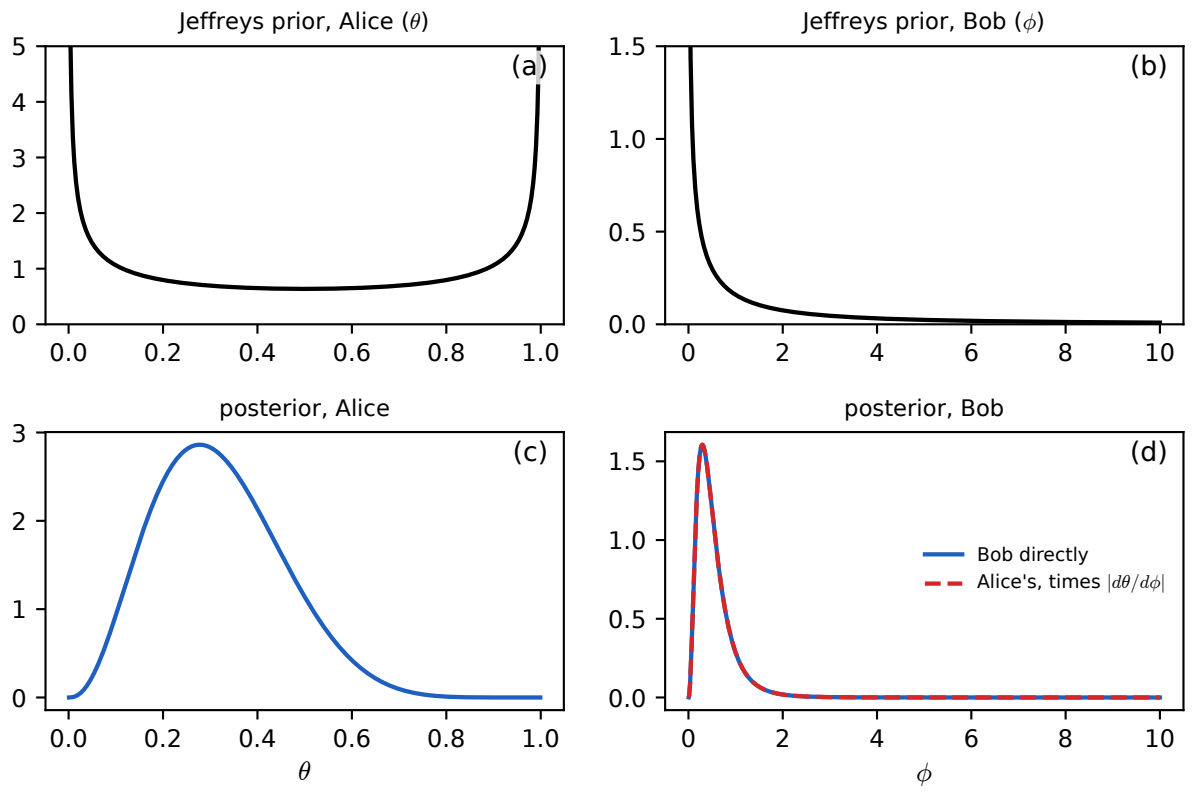

Jeffreys prior, Alice (θ)
(a)
Jeffreys prior, Bob (ϕ)
(b)
posterior, Alice
(c)
θ
posterior, Bob
(d)
Bob directly
Alice's, times $|d\theta/d\phi|$
ϕ