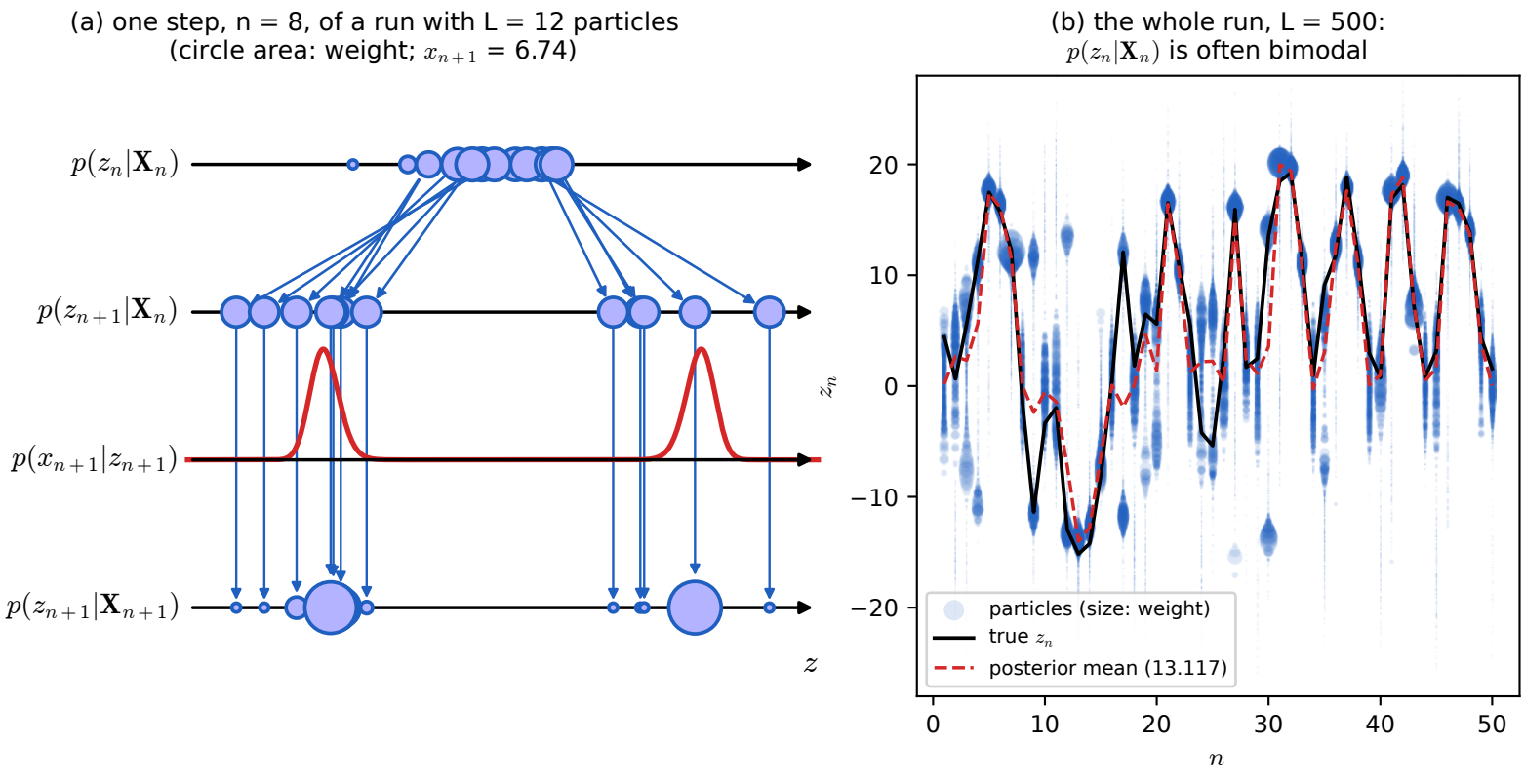

(a) one step, n = 8, of a run with L = 12 particles
(circle area: weight; x_{n+1} = 6.74)
$p(z_n|\mathbf{X}_n)$
$p(z_{n+1}|\mathbf{X}_n)$
$p(x_{n+1}|z_{n+1})$
$p(z_{n+1}|\mathbf{X}_{n+1})$
z
(b) the whole run, L = 500:
$p(z_n|\mathbf{X}_n)$ is often bimodal
z_n
20
10
0
−10
−20
0
10
20
30
40
50
n
particles (size: weight)
true z_n
posterior mean (13.117)