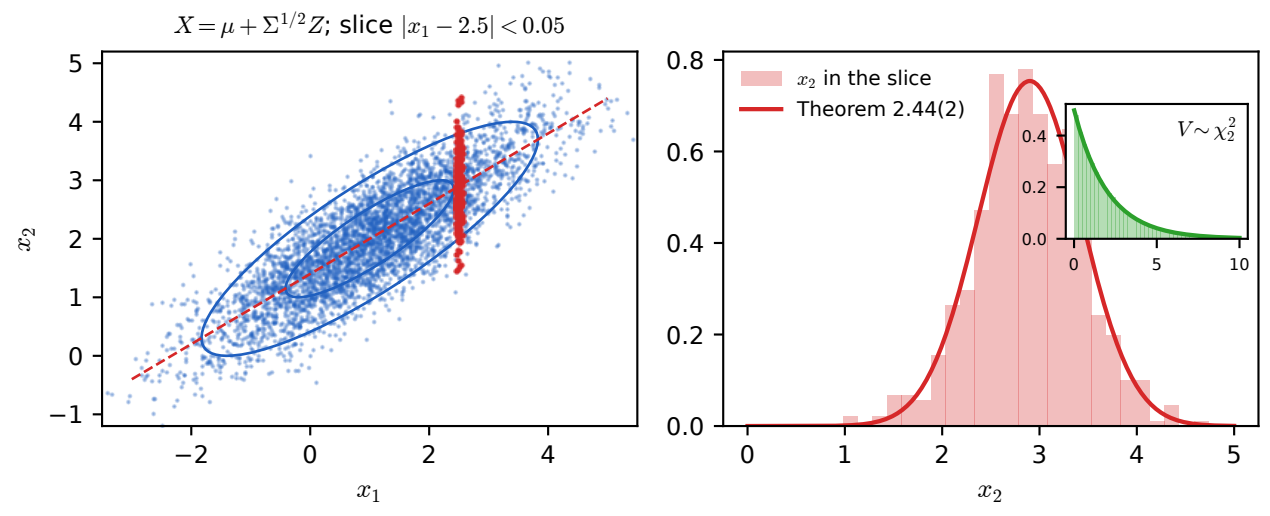

$X = \mu + \Sigma^{1/2} Z$; slice $|x_1 - 2.5| < 0.05$
x_1
x_2
x_2 in the slice
Theorem 2.44(2)
$V \sim \chi^2_2$