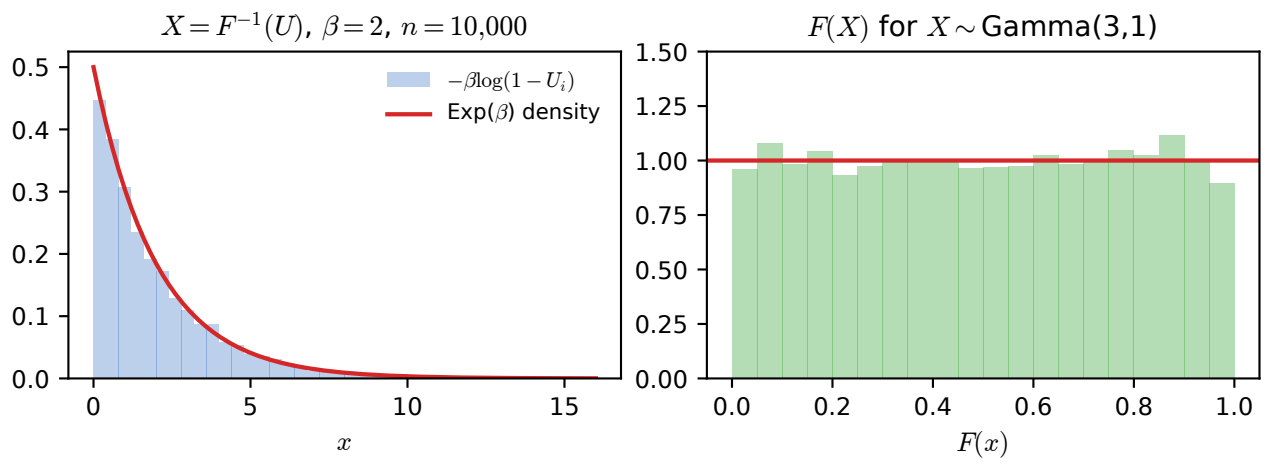

$X = F^{-1}(U)$, $\beta = 2$, $n = 10{,}000$
$-\beta \log(1 - U_i)$
Exp(β) density
0.5
0.4
0.3
0.2
0.1
0.0
0
5
10
15
x
$F(X)$ for $X \sim$ Gamma(3,1)
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0.0
0.2
0.4
0.6
0.8
1.0
$F(x)$