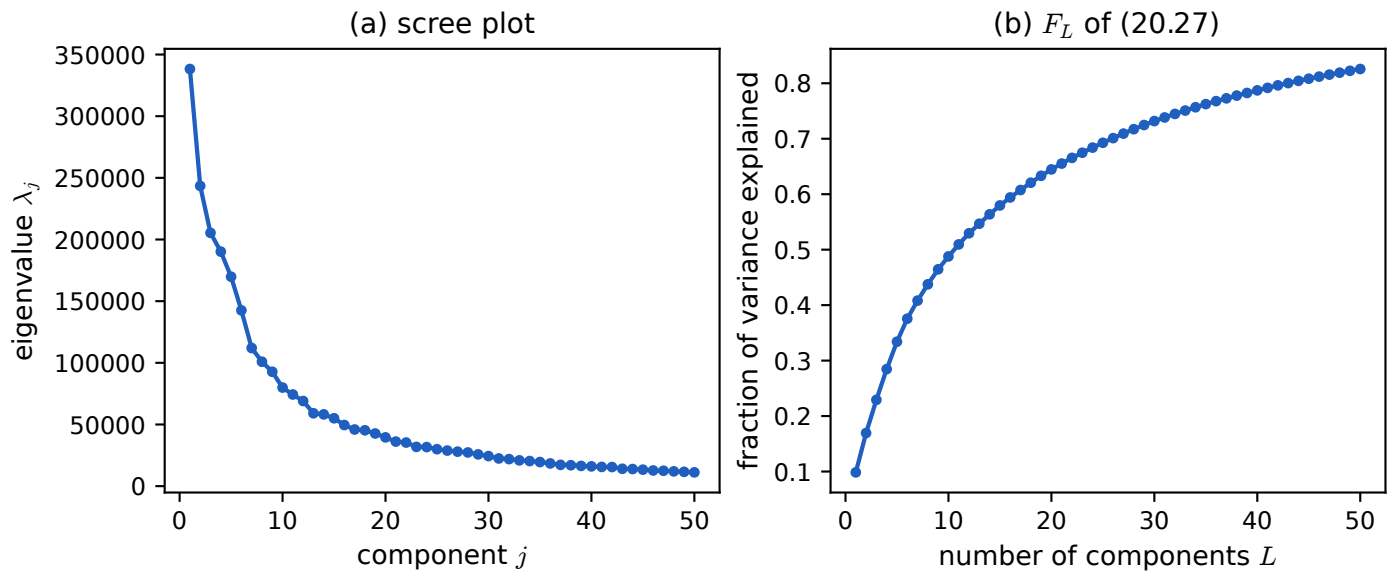

(a) scree plot
eigenvalue λ_j
component j
0
50000
100000
150000
200000
250000
300000
350000
0
10
20
30
40
50
(b) F_L of (20.27)
fraction of variance explained
number of components L
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0
10
20
30
40
50