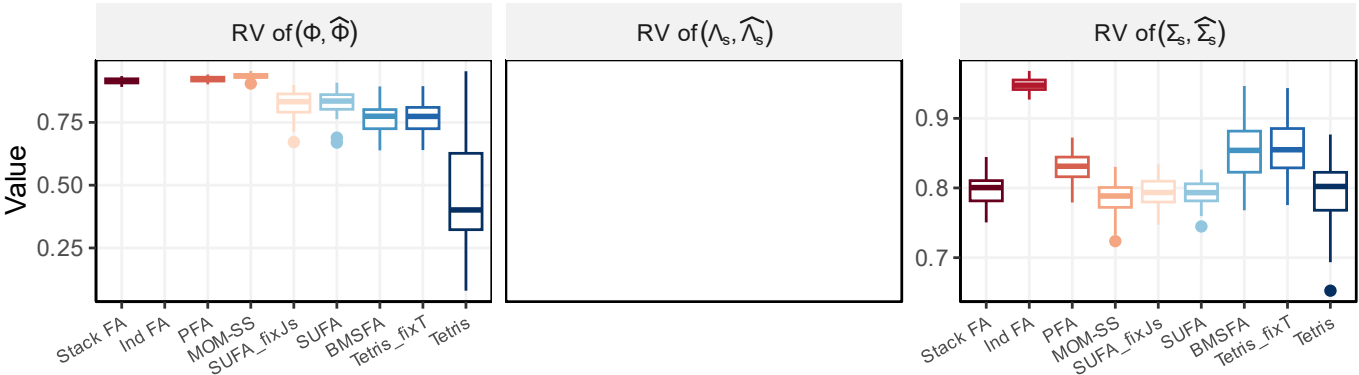
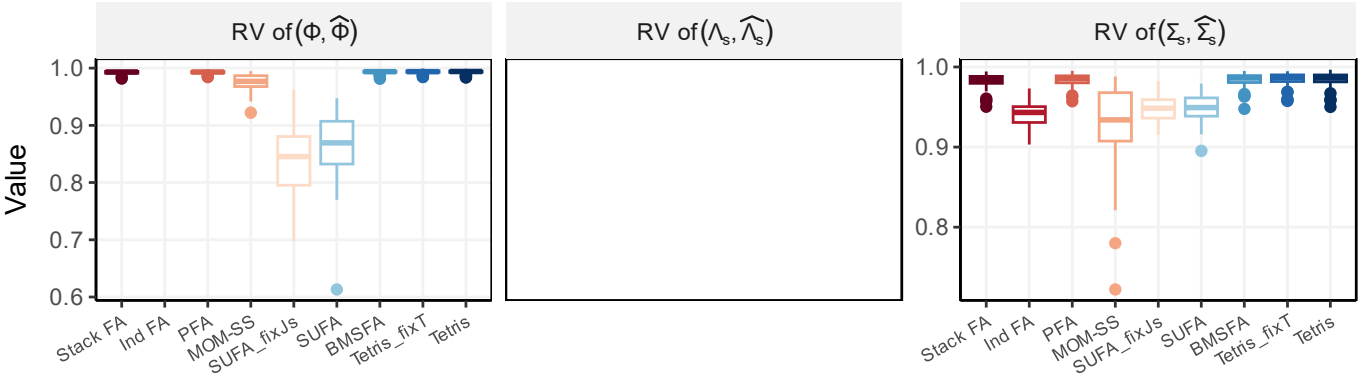


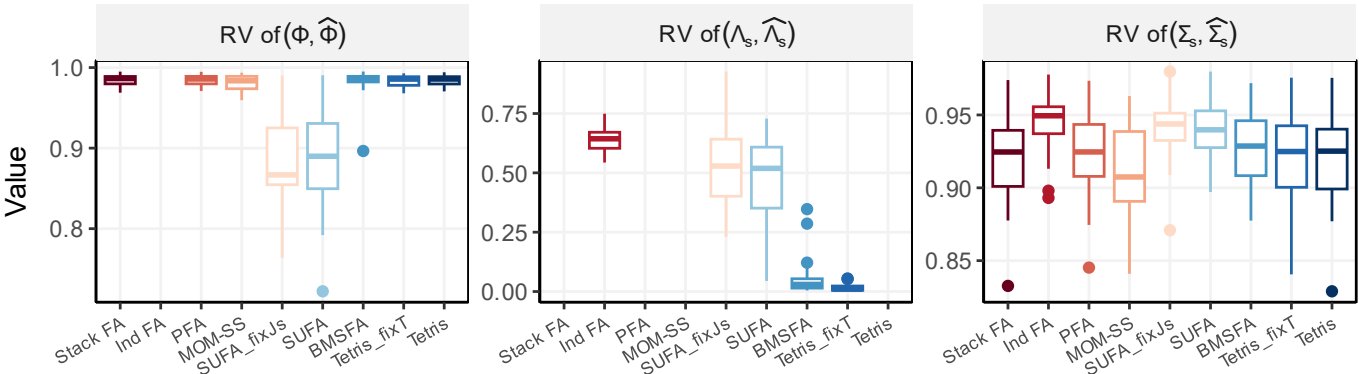
Scenario 1  
Based on PFA  
S = 4  
P = 40  
 $N_s = (100, 100, 100, 100)$   
K = 4 and Perturbations



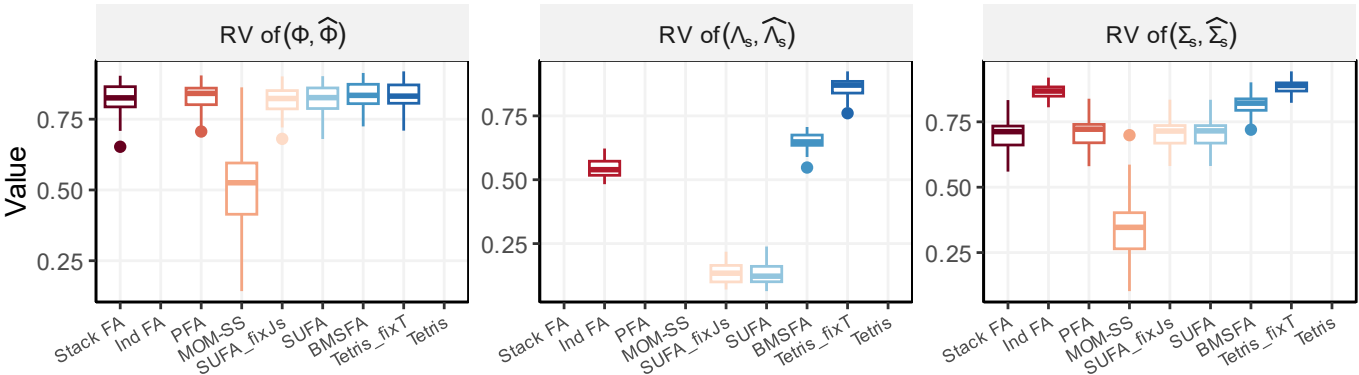
Scenario 2  
Based on MOM-SS  
S = 4  
P = 40  
 $N_s = (100, 100, 100, 100)$   
K = 4, Known covariates Q=2 plus study-specific intercepts



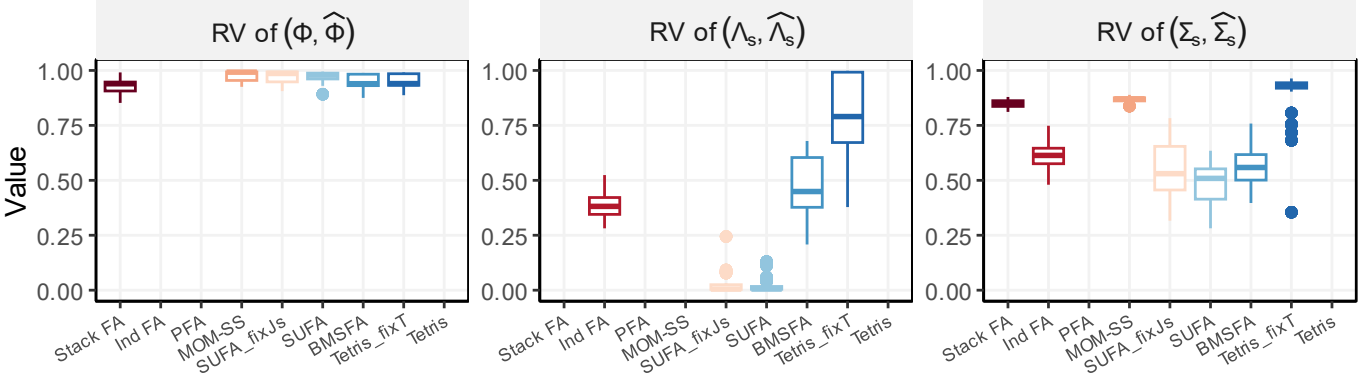
Scenario 3  
Based on SUFA  
S = 4  
P = 40  
 $N_s = (100, 100, 100, 100)$   
K = 4 and J\_s=(1, 1, 1, 1)



Scenario 4 (mimic nutrition)  
Based on Tetris plus 12 known covariates  
S = 12  
P = 42  
 $373 < N_s < 3775$   
K = 4, J\_s=(1, ..., 1), and 7 partial



Scenario 5 (mimic genomics)  
Based on Tetris  
S = 4  
P = 1060  
 $N_s = (157, 195, 285, 117)$   
K = 15, J\_s=(2, 2, 2, 2), and 3 partial



Method

Stack FA	PFA	SUFA_fixJs	BMSFA	Tetris
Ind FA	MOM-SS	SUFA	Tetris_fixT	