data: E with 4 continuous variables

GxE: g[,1]\*e[,1],g[,1]\*e[,2],g[,1]\*e[,3],g[,2]\*e[,4],g[,3]\*e[,1],g[,3]\*e[,2],

g[,4]\*e[,4],g[,5]\*e[,1],g[,5]\*e[,2],g[,6]\*e[,4],g[,7]\*e[,1],g[,7]\*e[,2]

n=200, p=500, seq(0,1,by=0.01), rep=30

3 level SNP

coefficients: (0.1, 0.5)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | BL | | | BLSS | | |
| error |  | main | interaction | total | main | interaction | total |
| n(0,1) | Top100 | 7.5 | 6.7 | 14.2 | 7.6 | 10.2 | 17.8 |
| SD | 0.86 | 1.49 | 1.83 | 0.67 | 0.09 | 1.32 |
| t(2) | Top100 | 5.83 | 3.47 | 9.3 | 6.33 | 7.57 | 13.9 |
| SD | 2.21 | 1.57 | 2.98 | 2.09 | 3.15 | 4.73 |
| lognorm(0,2) | Top100 | 0.77 | 0.73 | 1.5 | 0.57 | 0.67 | 1.23 |
| SD | 0.86 | 0.94 | 1.11 | 1.01 | 1.06 | 1.77 |
| 90% n(0,1) + 10% Cauchy(0,1) | Top100 | 6.03 | 4.4 | 10.43 | 6.03 | 8 | 14.03 |
| SD | 2.19 | 2.44 | 4.17 | 2.57 | 3.33 | 5.76 |
| 80% n(0,1) + 20% Cauchy(0,1) | Top100 | 5.53 | 3.63 | 9.16 | 5.07 | 6.73 | 11.8 |
| SD | 2.45 | 2.19 | 4.13 | 2.57 | 3.37 | 5.65 |

top1, top2, top3, top4, top5

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | LADBL | | | LADBLSS | | |
| error |  | main | interaction | total | main | interaction | total |
| n(0,1) | Top100 | 7.67 | 6.83 | 14.5 | 7.63 | 9.97 | 17.6 |
| SD | 0.66 | 1.82 | 1.96 | 0.56 | 1.54 | 1.67 |
| t(2) | Top100 | 7.07 | 5.97 | 13.03 | 7.4 | 9.2 | 16.6 |
| SD | 0.94 | 1.61 | 1.96 | 0.62 | 1.94 | 2.11 |
| lognorm(0,2) | Top100 | 5.9 | 3.5 | 9.4 | 5.67 | 9 | 14.67 |
| SD | 1.65 | 1.96 | 2.43 | 1.73 | 2.35 | 3.73 |
| 90% n(0,1) + 10% Cauchy(0,1) | Top100 | 7.27 | 6.87 | 14.13 | 7.53 | 10 | 17.53 |
| SD | 0.91 | 1.48 | 1.74 | 0.63 | 1.43 | 1.57 |
| 80% n(0,1) + 20% Cauchy(0,1) | Top100 | 7.47 | 5.43 | 12.9 | 7.37 | 10.47 | 17.83 |
| SD | 0.97 | 1.77 | 2.04 | 0.85 | 1.46 | 1.91 |