

**Table S1: Root mean square error (RMSE) for 6 HGDP data sets as a function of the regularization parameter.**

$\alpha$	0	1	10	100	1000
<b>RMSE</b>	0.046 [0.035,0.064]	0.044 [0.035,0.057]	0.041 [0.035,0.052]	0.041 [0.031,0.061]	0.055 [0.033, 0.095]