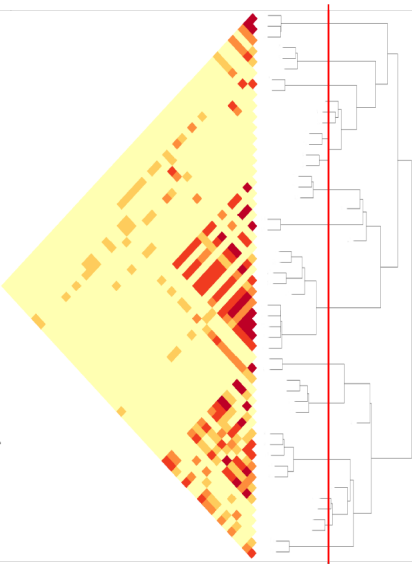
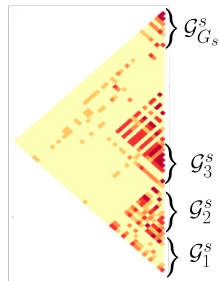
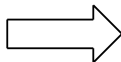


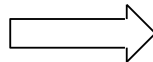
Cut of the constrained  
hierarchical tree at level  $s$



Identify  
clusters



Apply the  
aggregating function  
to each SNP cluster



New predictor matrix  
 $\tilde{\mathbf{X}}^s \in \mathbb{R}^{n \times G_s}$

$$\begin{bmatrix} \tilde{x}_{11}^s & \tilde{x}_{12}^s & \cdots & \tilde{x}_{1G_s}^s \\ \tilde{x}_{21}^s & & \ddots & \\ \vdots & & & \\ \tilde{x}_{n1}^s & \tilde{x}_{n2}^s & \cdots & \tilde{x}_{nG_s}^s \end{bmatrix}$$