

P : Feature Matrix

$$\begin{matrix} & \begin{matrix} \text{triangle} \oplus & \text{moon} & \text{star} \square \end{matrix} \\ \begin{matrix} \text{AC>AA} & \text{TC>GG} \end{matrix} & \begin{pmatrix} 0 & 0 & 1 \\ 2 & 1 & 1 \end{pmatrix} \end{matrix} \approx$$

$m \times n$

S : Signature Matrix

$$\begin{matrix} & \text{Sig. 1} & \text{Sig. 2} \\ \begin{matrix} \text{AC>AA} & \text{TC>GG} \end{matrix} & \begin{pmatrix} 0 & .5 \\ 1 & .5 \end{pmatrix} \end{matrix}$$

$m \times r$

D : Relative Exposure Matrix

$$\begin{matrix} & \begin{matrix} \text{triangle} \oplus & \text{moon} & \text{star} \square \end{matrix} \\ \begin{pmatrix} 1 & 1 \\ 0 & 0 \end{pmatrix} & \begin{pmatrix} 0 \\ 1 \end{pmatrix} \end{matrix}$$

$r \times n$

C : Count Matrix

$$\begin{pmatrix} 2 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & 2 \end{pmatrix}$$

$n \times n$

Tree-constrained Exposures

