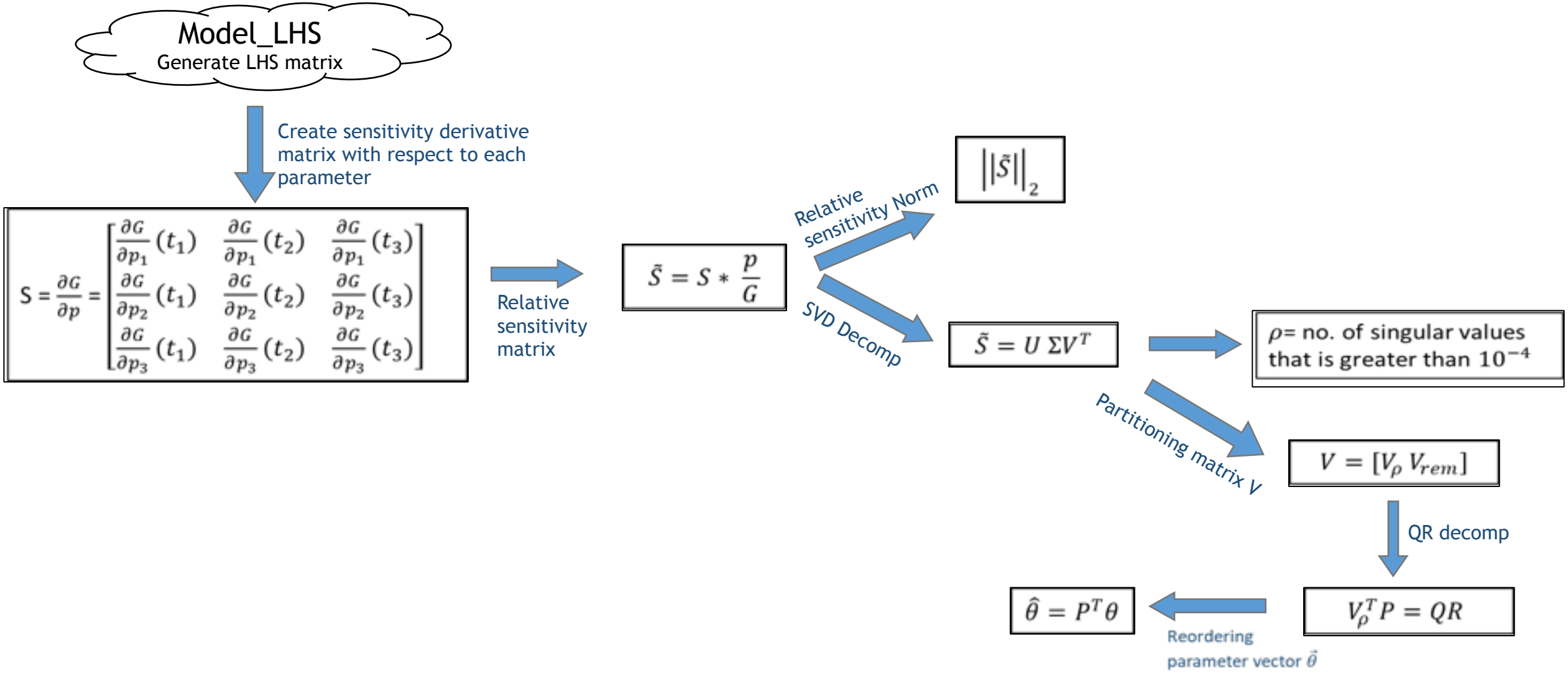
Model_LHS
Generate LHS matrix
Create sensitivity derivative matrix with respect to each parameter
$S = \frac{\partial G}{\partial p} = \begin{bmatrix} \frac{\partial G}{\partial p_1}(t_1) & \frac{\partial G}{\partial p_1}(t_2) & \frac{\partial G}{\partial p_1}(t_3) \\ \frac{\partial G}{\partial p_2}(t_1) & \frac{\partial G}{\partial p_2}(t_2) & \frac{\partial G}{\partial p_2}(t_3) \\ \frac{\partial G}{\partial p_3}(t_1) & \frac{\partial G}{\partial p_3}(t_2) & \frac{\partial G}{\partial p_3}(t_3) \end{bmatrix}$
Relative sensitivity matrix
$\tilde{S} = S * \frac{p}{G}$
Relative sensitivity Norm
$\left\|\tilde{S}\right\|_2$
SVD Decomp
$\tilde{S} = U\,\Sigma V^T$
ρ= no. of singular values that is greater than 10^{-4}
Partitioning matrix V
$V = [V_\rho\ V_{rem}]$
QR decomp
$V_\rho^T P = QR$
Reordering parameter vector $\vec{\theta}$
$\hat{\theta} = P^T\theta$