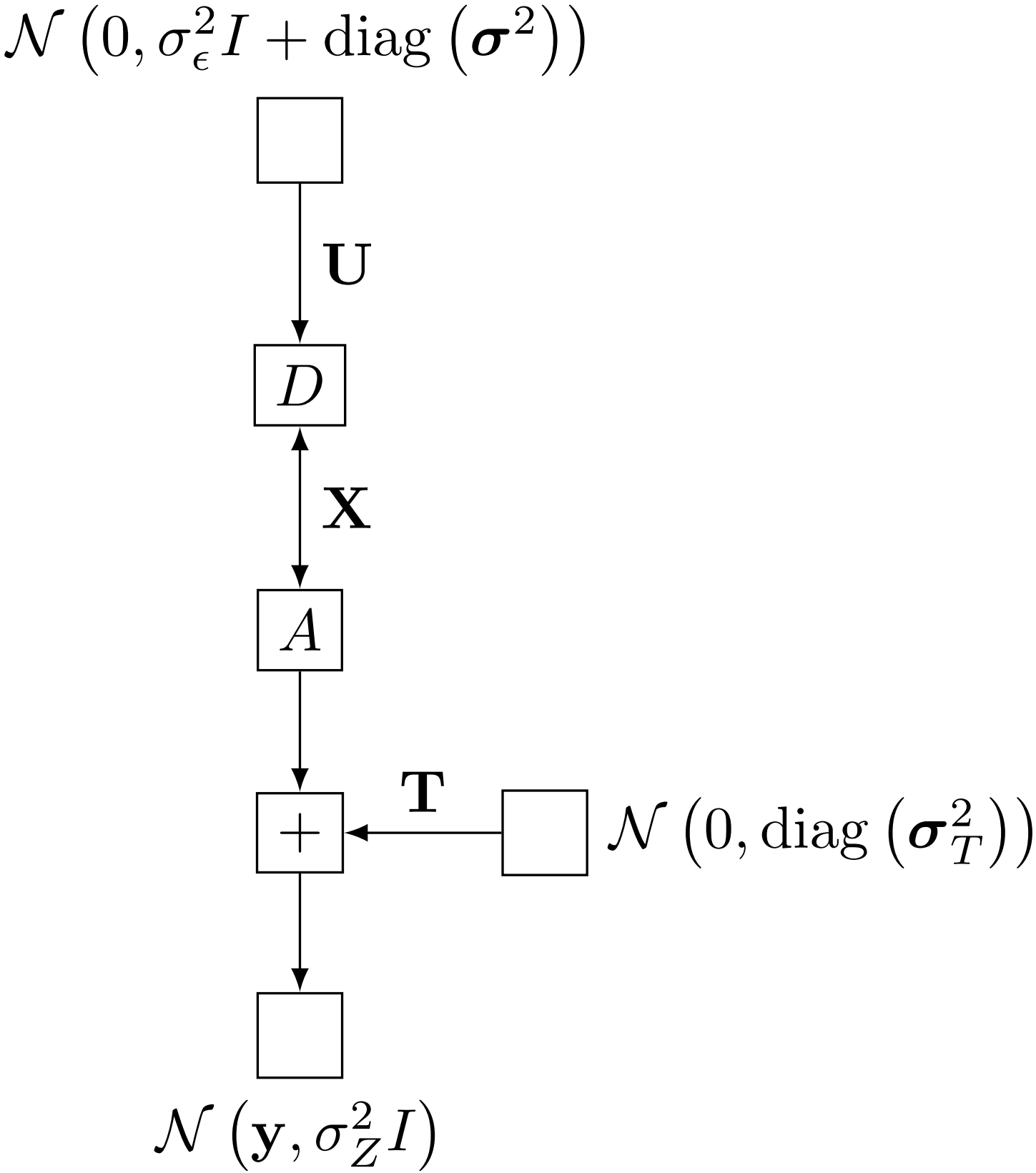
$\mathcal{N}\left(0, \sigma_\epsilon^2 I + \mathrm{diag}\left(\boldsymbol{\sigma}^2\right)\right)$
$\mathbf{U}$
D
$\mathbf{X}$
A
$\mathbf{T}$
$+$
$\mathcal{N}\left(0, \mathrm{diag}\left(\boldsymbol{\sigma}_T^2\right)\right)$
$\mathcal{N}\left(\mathbf{y}, \sigma_Z^2 I\right)$