We suggest the following notations:

- variable x
- ullet vector  $oldsymbol{x}$  with ith element  $x_i$
- matrix  $\boldsymbol{X}$  with ith column  $\boldsymbol{x}_i$  and (i,j)th element  $x_{ij}$
- ullet random variable X

Longer equations should not use  $\..\$ . Use the equation or align modes instead:

$$oldsymbol{x}_i^Toldsymbol{x}_j = oldsymbol{\Gamma}.$$