We suggest the following notations:

- variable x

- vector $\boldsymbol{x}$ with ith element x_i

- matrix $\boldsymbol{X}$ with ith column $\boldsymbol{x}_i$ and (i, j)th element x_{ij}

- random variable X

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

$$\boldsymbol{x}_i^T \boldsymbol{x}_j = \boldsymbol{\Gamma}.$$