

Component arithmetic

Tensor plus scalar adds the scalar to each tensor component.

$$(x,y,z) + 10$$

$$\begin{bmatrix} x + 10 \\ y + 10 \\ z + 10 \end{bmatrix}$$

The product of two tensors is the Hadamard (element-wise) product.

$$A = ((1,2),(3,4))$$

$$B = ((a,b),(c,d))$$

$$A \ B$$

$$\begin{bmatrix} a & 2b \\ 3c & 4d \end{bmatrix}$$

Tensor raised to a power raises each component to the power.

$$(x,y,z)^2$$

$$\begin{bmatrix} x^2 \\ y^2 \\ z^2 \end{bmatrix}$$