

## Component arithmetic

Tensor plus scalar adds scalar to each tensor component.

$A = ((a, b), (c, d))$   
 $A + 10$

$$\begin{bmatrix} a + 10 & b + 10 \\ c + 10 & d + 10 \end{bmatrix}$$

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

$A = ((a, b), (c, d))$   
 $A \ A$

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

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

$A = ((a, b), (c, d))$   
 $A^2$

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