



probably  
not with this  
bracket.

$$\text{div}_y [a, b] \stackrel{?}{=} D_a^y(\text{div}_y b) - D_b^y(\text{div}_y a)$$

$$\text{div } D = D + D^*$$

$$\text{div}[XY] = XY - YX + Y^* X^* - X^* Y^*$$

$$= \cancel{XY} - \cancel{YX} + (\text{div } Y - \underline{Y})(\text{div } X - \underline{X}) - (\text{div } X - \underline{X})(\text{div } Y - \underline{Y})$$

$$= -\text{div } Y \cdot X - Y \text{div } X + \text{div } X Y + X \text{div } Y$$

$$= X(\text{div } Y) - Y(\text{div } X)$$