(t, x, y, z)

$\phi^t \boldsymbol{e}_t + \phi^x \boldsymbol{e}_x + \phi^y \boldsymbol{e}_y + \phi^z \boldsymbol{e}_z$

$\left(\partial_t \phi^t + \partial_x \phi^x + \partial_y \phi^y + \partial_z \phi^z\right) + \left(\partial_x \phi^t + \partial_t \phi^x\right) \boldsymbol{e}_t \wedge \boldsymbol{e}_x + \left(\partial_y \phi^t + \partial_t \phi^y\right) \boldsymbol{e}_t \wedge \boldsymbol{e}_y + \left(\partial_z \phi^t + \partial_t \phi^z\right) \boldsymbol{e}_t \wedge \boldsymbol{e}_z + \left(\partial_y \phi^x - \partial_x \phi^y\right) \boldsymbol{e}_x \wedge \boldsymbol{e}_y + \left(\partial_z \phi^x - \partial_x \phi^z\right) \boldsymbol{e}_x \wedge \boldsymbol{e}_z + \left(\partial_z \phi^y - \partial_y \phi^z\right) \boldsymbol{e}_y \wedge \boldsymbol{e}_z$

$\left(\partial_x \phi^t + \partial_t \phi^x\right) \boldsymbol{e}_t \wedge \boldsymbol{e}_x$

$\left(-\partial_x^2 \phi^t - \partial_t \partial_x \phi^x\right) \boldsymbol{e}_t + \left(\partial_t \partial_x \phi^t + \partial_t^2 \phi^x\right) \boldsymbol{e}_x + \left(-\partial_x \partial_y \phi^t - \partial_t \partial_y \phi^x\right) \boldsymbol{e}_t \wedge \boldsymbol{e}_x \wedge \boldsymbol{e}_y + \left(-\partial_x \partial_z \phi^t - \partial_t \partial_z \phi^x\right) \boldsymbol{e}_t \wedge \boldsymbol{e}_x \wedge \boldsymbol{e}_z$