

Nº 1

$$K_{\mu\nu}^{\lambda\kappa} = \frac{1}{2} \left( -\delta_{\mu}^{\lambda} \delta_{\nu}^{\kappa} \square + \delta_{\mu}^{\lambda} \eta^{\kappa\alpha} \partial_{\alpha} \partial_{\nu} + \delta_{\nu}^{\kappa} \eta^{\lambda\alpha} \partial_{\alpha} \partial_{\mu} - \eta^{\lambda\kappa} \partial_{\mu} \partial_{\nu} \right), \quad \square = \eta^{\mu\nu} \partial_{\mu} \partial_{\nu}$$

$$K_{\mu\nu}^{\lambda\kappa} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) = \frac{1}{2} \left( -\delta_{\mu}^{\lambda} \delta_{\nu}^{\kappa} \eta^{\alpha\beta} \partial_{\alpha} \partial_{\beta} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) + \delta_{\mu}^{\lambda} \eta^{\kappa\alpha} \partial_{\alpha} \partial_{\nu} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) + \delta_{\nu}^{\kappa} \eta^{\lambda\alpha} \partial_{\alpha} \partial_{\mu} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) - \eta^{\lambda\kappa} \partial_{\mu} \partial_{\nu} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) \right) =$$

$$\partial_{\alpha} \partial_{\nu} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) + \delta_{\nu}^{\kappa} \eta^{\lambda\alpha} \partial_{\alpha} \partial_{\mu} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) - \eta^{\lambda\kappa} \partial_{\mu} \partial_{\nu} (\varphi_{\lambda,\kappa} + \varphi_{\kappa,\lambda}) =$$

$$= \frac{1}{2} \left( -\eta^{\alpha\beta} \varphi_{\mu,\nu\beta\alpha} - \eta^{\alpha\beta} \varphi_{\nu,\mu\beta\alpha} + \eta^{\kappa\alpha} \varphi_{\mu,\kappa\partial\alpha} + \eta^{\kappa\alpha} \varphi_{\kappa,\mu\partial\alpha} + \right.$$

$$\left. + \eta^{\lambda\alpha} \varphi_{\lambda,\partial\mu\alpha} + \eta^{\lambda\alpha} \varphi_{\partial,\lambda\mu\alpha} - \eta^{\lambda\kappa} \varphi_{\lambda,\kappa\partial\mu} - \eta^{\lambda\kappa} \varphi_{\kappa,\lambda\partial\mu} + \eta^{\lambda\kappa} \varphi_{\partial,\lambda\mu\kappa} \right) = 0$$

