$$line : \sum_{j=1}^{\infty} \left(\frac{1}{\epsilon_0^{-1} + \delta\lambda_j^{\alpha/2}} \right)^2 \langle e_j, (a + \delta A^{\alpha/2})(\epsilon_0^{-1} + \delta A^{\alpha/2})^{-2}(ae_k)\rangle_{\mathcal{H}}^2 \leq$$

$\mathrm{norm}_s tr :$