

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

$$\mathrm{norm}_s tr:$$