

$$\Delta = \partial_i \partial_i$$

$$e_\alpha \P = \exp \frac{1}{4\nu \widetilde{\alpha}} \partial_i \partial_i = \exp \frac{1}{4\nu \widetilde{\alpha}} \Delta$$

$$\underbrace{{}^xe_\alpha\P}_{\mathfrak{e}_y} = {}^y\mathfrak{e}_y^{1/4\nu\widetilde{\alpha}}\, {}^xe_y$$

$$\text{LHS} \; = \; \left(\frac{\nu \widetilde{\alpha}}{\pi}\right)^{d/2} \int\limits_{\mathbb{R}^d}^{d\xi} {}^{x-\xi}\!{}_{\nu}^{\widetilde{\alpha}}\mathfrak{e}_{x-\xi}^{\;}\, {}^\xi\mathfrak{e}_y \; = \; \widetilde{\alpha}^{d/2} \, {}^x\mathfrak{e}_y \, \left(\frac{\nu}{\pi}\right)^{d/2} \int\limits_{\mathbb{R}^d}^{d\xi} {}^{\xi-x}\!{}_{\nu}^{\widetilde{\alpha}}\mathfrak{e}_{\xi-x}^{\;}\, {}^{\xi-x}\mathfrak{e}_y \; = \; \widetilde{\alpha}^{d/2} \, \widetilde{\alpha}^{-d/2} \, {}^x\mathfrak{e}_y \, {}^{y/2}\!{}_{\nu}^{\widetilde{\alpha}}\mathfrak{e}_{y/2}^{\;}\, = \; \text{RHS}$$

$$\partial_i \partial_i \, {}^x\mathfrak{e}_y = \sum_i \left(y|e_i\right) \left(e_i|y\right) \, {}^x\mathfrak{e}_y = (y|y) \, {}^x\mathfrak{e}_y$$

$$\underbrace{\exp t\partial_i\partial_i}_{\mathfrak{e}_y} = {}^y\mathfrak{e}_y^t \, \mathfrak{e}_y \Rightarrow t = \frac{1}{4\nu\widetilde{\alpha}}$$