

$$\sum_{\sigma \leq \beta} \binom{\beta}{\sigma} D^{\gamma+\sigma}_{\xi} D^{\alpha-(\gamma+\sigma)}_u + \sum_{\sigma \leq \beta} \binom{\beta}{\sigma} D^{\sigma}_{\xi} D^{\alpha-\sigma}_u$$

$$\sum_{\gamma \leq j \leq \alpha} \binom{\alpha-\gamma}{j-\gamma} D^j_{\xi} D^{\alpha-j}_u + \sum_{j \leq \alpha-\gamma} \binom{\alpha-\gamma}{j} D^j_{\xi} D^{\alpha-j}_u$$

$$0 \leq \sigma \leq \beta$$

$$\gamma \leq \sigma + \gamma \leq \kappa$$

$$\underbrace{\sum_{\gamma \leq j \leq \alpha-\gamma}} + \sum_{\alpha-\gamma < j \leq \alpha} \quad + \quad \sum_{0 \leq j < \gamma} \quad + \quad \sum_{\gamma \leq j \leq \alpha-\gamma}$$

\downarrow $j = \alpha$ \downarrow $j = 0$

$$\sum_{\gamma \leq j \leq \alpha} \binom{\beta}{j-\gamma} D^j D^{\alpha-j} + \sum_{j \leq \beta} \binom{\beta}{j} D^j D^{\kappa-j}$$

$\swarrow \quad \downarrow$ $\swarrow \quad \downarrow$

$$0 \leq j < \gamma \quad j = 0$$

$$\underbrace{0 \leq j_1 < 1}_{\text{}} \quad 0 \leq j_2 < 0$$

$$\sum_{\gamma \leq j \leq \beta} + \sum_{\beta < j \leq \alpha}$$

$$\sum_{\gamma \leq j \leq \beta} \binom{\alpha}{j} D^j D^{\alpha-j}$$

$$\sum_{0 \leq j < \gamma} + \sum_{\gamma \leq j \leq \beta}$$

$\searrow \quad \rightarrow j = 0$

$$\sum_{j \leq \beta} \binom{\kappa}{j} D^j_{\xi} D^{\kappa-j}_u$$

$$+ D^{\kappa}_{\xi} D^0_u$$

$$\sum_{j \leq \alpha}$$

$$\sum_{j \leq \beta} \binom{\alpha}{j} D^j_{\xi} D^{\alpha-j}_u + \binom{\beta}{0} D^0_{\xi} D^{\alpha}_u + \binom{\beta}{\beta} D^{\kappa}_{\xi} D^0_u$$

$$- \binom{\alpha}{0} D^0_{\xi} D^{\alpha}_u$$

\downarrow