

$$d\,v\,/\,(2\pi i)^d = d\backslash \mathfrak{X}.$$

$${}_{o\cdot < R\cdot} \mathbb{C}^d \bigtriangledown_{\omega} \mathbb{C} \ni \gamma$$

$${}_{\cdot\mathfrak{X}^-}{}^o\gamma\in\mathbb{C}\bigtriangledown_{d\mathbb{N}}$$

$${}_{\mathfrak{X}^-}{}^o\gamma=\frac{1}{{}_1\mathscr{X}!\cdots_n\mathscr{X}!}\partial_1^{1\mathscr{X}}\cdots\partial_n^{n\mathscr{X}}{}_{o^1\cdots o^d}\gamma=\frac{1}{{}_1\mathscr{X}!\cdots_n\mathscr{X}!}\frac{\partial}{{\partial w^1}}{}^{1\mathscr{X}}\cdots\frac{\partial}{{\partial w^d}}{}^{n\mathscr{X}}{}_{o^1\cdots o^d}\gamma=\int\limits_{d\backslash \mathfrak{X}}\overline{{}_{o\cdot}^{\mathbb{C}^d}_r}\frac{{}_{v\cdot}\gamma}{{}_{v\cdot\mathscr{X}\pm\mathfrak{z}}{}_o}.$$

$$\check{r}^{\cdot}\overline{{}_{\mathfrak{X}}^o\gamma}\leqslant {}_{o\cdot}^{\mathbb{C}^d}_r\overline{\mathfrak{z}}^{\bullet}$$

$$\text{LHS} \,=\, \check{r}^{\cdot}\overline{\int\limits_{d\backslash \mathfrak{X}}\overline{{}_{o\cdot}^{\mathbb{C}^d}_r}\frac{{}_{v\cdot}\gamma}{{}_{v\cdot\mathscr{X}\pm\mathfrak{z}}{}_o}}\leqslant \check{r}^{\cdot}\int\limits_{\overline{d\backslash \mathfrak{X}}}\overline{{}_{o\cdot}^{\mathbb{C}^d}_r}\frac{\overline{{}_{v\cdot}\gamma}}{\overline{{}_{v\cdot-o\cdot}}^{\mathscr{X}+\mathfrak{z}}}\leqslant \frac{\check{r}^{\cdot\mathfrak{z}}\check{r}^{\cdot}}{\mathscr{X}^{\mathfrak{z}}\mathfrak{z}^{\cdot}}{}_{o\cdot}^{\mathbb{C}^d}_r\overline{\mathfrak{z}}^{\bullet}=\text{RHS}$$

$$0 < \overline{\zeta^j} \leqslant q^j < 1: \quad k \in \mathbb{N} \Rightarrow \overline{\mathfrak{z}^{-\mathfrak{z}} \zeta^{\cdot} - \sum_{\varkappa}^{d^k} \zeta^{\varkappa \cdot}} \leqslant \frac{1 - \mathfrak{z}^{\pm} \check{q}^{\cdot}}{\mathfrak{z}^{\pm} q^{\cdot}}$$

$$\sum_{\varkappa}^{d^{\mathbb{N}}} \zeta^{\varkappa \cdot} = \prod_j \sum_{\varkappa_j \in \mathbb{N}} \zeta^{\varkappa_j j} = \prod_j \frac{1}{1 - \zeta^j} = \mathfrak{z}^{-\mathfrak{z}} \zeta^{\cdot}$$

$$\sum_{\varkappa}^{d^k} \zeta^{\varkappa \cdot} = \prod_j \sum_{\varkappa_j \in k} \zeta^{\varkappa_j j} = \prod_j \frac{1 - \zeta^{kj}}{1 - \zeta^j} = \frac{\mathfrak{z}^{\pm} \zeta^{\cdot}}{\mathfrak{z}^{\pm} \zeta^{\cdot}}$$

$$\Rightarrow \text{LHS} = \overline{\sum_{\varkappa \not\in d^k} \zeta^{\varkappa \cdot}} \leqslant \sum_{\varkappa \not\in d^k} \overline{\zeta^{\varkappa \cdot}} \leqslant \sum_{\varkappa \not\in d^k} \check{q}^{\cdot} = \mathfrak{z}^{-\mathfrak{z}} q^{\cdot} - \sum_{\varkappa}^{d^k} \check{q}^{\cdot} = \text{RHS}$$

$$\overline{w^j - o^j} \leqslant u^j < r^j = \overline{v^j - o^j} \Rightarrow \overline{v^{-\mathfrak{z}} w^{\cdot} - \sum_{\varkappa}^{d^k} \frac{w^{\varkappa \cdot} o^{\cdot}}{v^{\cdot \mathfrak{z} \pm \varkappa \cdot}}} \leqslant \frac{1 - \mathfrak{z}^{\pm} u^{\cdot k} / r^{\cdot}}{r^{\cdot \pm} u^{\cdot}}$$

$$\frac{v^{\cdot \pm} o^{\cdot}}{v^{\cdot \pm} w^{\cdot}} = \prod_j \frac{v^j - o^j}{v^j - w^j} = \prod_j 1^{-\mathfrak{z}} \frac{w^j - o^j}{v^j - o^j} = \mathfrak{z}^{-\mathfrak{z}} \frac{w^{\cdot} - o^{\cdot}}{v^{\cdot} - o^{\cdot}}$$

$$\Rightarrow r^{\mathfrak{z}} \text{ LHS} = \overline{\mathfrak{z}^{-\mathfrak{z}} \frac{w^{\cdot} - o^{\cdot}}{v^{\cdot} - o^{\cdot}} - \sum_{\varkappa}^{d^k} \frac{w^{\varkappa \cdot} o^{\cdot}}{v^{\varkappa \cdot} o^{\cdot}}} \leqslant \frac{1 - \mathfrak{z}^{\pm} u^{\cdot k} / r^{\cdot}}{\mathfrak{z}^{\pm} u^{\cdot} / r^{\cdot}} = r^{\mathfrak{z}} \text{ RHS}$$

$$\text{poly-disc } {}_o\mathbb{C}^d_{<R^j} \subset \mathfrak{H}: \quad 0 < R^j \leq +\infty: \quad \mathfrak{I} \in \mathfrak{H}_{\omega} \triangleleft_{\omega} \mathbb{C}$$

$${}^w\mathfrak{I} \overset{\text{cpt}}{\overset{{}_o\mathbb{C}^d_{<R^j}}{\rightleftarrows}} \sum_{{\mathfrak{X}}}^{d^{\mathbb{N}}} w^{\cdot} \mathfrak{Z} {}_o^{\cdot} \mathfrak{I}_{\mathfrak{X}^{-}}$$

$$\overline{w^j - o^j} \leq w^j < r^j < R^j \Rightarrow \overline{{}^w\mathfrak{I} - \sum_{{\mathfrak{X}}}^{d^k} w^{\cdot} \mathfrak{Z} {}_o^{\cdot} \mathfrak{I}_{\mathfrak{X}^{-}}} \leq \frac{1 - \mathfrak{I}^{\pm} u^k / r^{\cdot}}{\mathfrak{I}^{\pm} u^{\cdot} / r^{\cdot}} {}_o^{\cdot} \mathbb{C}^d_{<r^{\cdot}} \overset{\bullet}{\mathfrak{I}}$$

$$\begin{aligned} \text{LHS} &= \overbrace{\int_{{}_o\mathbb{C}^d_{<r^{\cdot}}} \frac{{}_v^{\cdot} \mathfrak{I}}{v^{\cdot} \mathfrak{I}^{\pm} w^{\cdot}} - \sum_{{\mathfrak{X}}}^{d^k} w^{\cdot} \mathfrak{Z} {}_o^{\cdot} \int_{{}_o\mathbb{C}^d_{<r^{\cdot}}} \frac{{}_v^{\cdot} \mathfrak{I}}{v^{\cdot} \mathfrak{I}^{\pm} \pm \mathfrak{X} {}_o^{\cdot}}}^{\overbrace{\int_{{}_o\mathbb{C}^d_{<r^{\cdot}}} v^{\cdot} \mathfrak{I}^{\pm} w^{\cdot} - \sum_{{\mathfrak{X}}}^{d^k} \frac{w^{\cdot} \mathfrak{Z} {}_o^{\cdot}}{v^{\cdot} \mathfrak{I}^{\pm} \pm \mathfrak{X} {}_o^{\cdot}} {}_v^{\cdot} \mathfrak{I}}}_{\overbrace{\int_{{}_o\mathbb{C}^d_{<r^{\cdot}}} v^{\cdot} \mathfrak{I}^{\pm} w^{\cdot} - \sum_{{\mathfrak{X}}}^{d^k} \frac{w^{\cdot} \mathfrak{Z} {}_o^{\cdot}}{v^{\cdot} \mathfrak{I}^{\pm} \pm \mathfrak{X} {}_o^{\cdot}} \overline{{}_v^{\cdot} \mathfrak{I}}}}^{d^{\mathbb{N}}}} \leq \frac{\mathfrak{I}^{\pm} \cdot 1 - \mathfrak{I}^{\pm} u^k / r^{\cdot}}{r^{\cdot} \mathfrak{I}^{\pm} u^{\cdot}} {}_o^{\cdot} \mathbb{C}^d_{<r^{\cdot}} \overset{\bullet}{\mathfrak{I}} = \text{RHS} \end{aligned}$$

$$\text{cpt } K \subset {}_o\mathbb{C}^d_{<R^j} \Rightarrow w^j = \overset{K}{\overbrace{w^j - o^j}^{\bullet}} < R^j \quad \overset{K}{\Rightarrow}_{w^j < r^j < R^j} \overbrace{{}^w\mathfrak{I} - \sum_{{\mathfrak{X}}}^{d^k} w^{\cdot} \mathfrak{Z} {}_o^{\cdot} \mathfrak{I}_{\mathfrak{X}^{-}}}^{\bullet} \leq \frac{1 - \mathfrak{I}^{\pm} u^k / r^{\cdot}}{\mathfrak{I}^{\pm} u^{\cdot} / r^{\cdot}} {}_o^{\cdot} \mathbb{C}^d_{<r^{\cdot}} \overset{\bullet}{\mathfrak{I}} \underset{k}{\rightsquigarrow}_{\infty} 0$$