

$$\gamma \in \text{Aut}(X) \setminus \Omega_{\mathbb{C}}^c \Rightarrow \int_{\nu_{\zeta}^0}^{\Omega} \zeta \gamma = \int_{dx_1 \dots dx_r}^{\mathbb{R}_+^r} \prod_{i < j} \overline{x_j - x_i}^a \sum_j \sqrt{x_j} e_j \gamma$$

$$\gamma \in K_{\mathbb{R}} \setminus D_{\mathbb{R}} \setminus \Omega_{\mathbb{C}}^c \Rightarrow \int_{\nu_{\zeta}^0}^{D_{\mathbb{R}}} \zeta \gamma = \int_{dx_1 \dots dx_r}^{0|1^r} \prod_{i < j} \overline{x_j - x_i}^a \prod_j x_j^{(c+b-1)/2} \prod_j (1 - x_j)^{-1-c-b/2-a(r-1)} \sum_j \sqrt{x_j} e_j \gamma$$

$$\int_{d\zeta}^{D_{\mathbb{R}}} \zeta \gamma = C \int_{\nu_{\zeta}^0}^{D_{\mathbb{R}}} \zeta \Delta_{\mathbb{C}}^{p_{\mathbb{C}}/2} \zeta \gamma$$

$$p_{\mathbb{C}} r_{\mathbb{C}} = 2 \dim X \times Y + \dim V$$

$$\int_{dz}^{\mathbb{L}_{\mathbb{R}}} z \eta = \frac{\pi^{d/2}}{\Gamma_{d/2r}^{\Omega}} \int_{dx}^{\Omega} \sqrt{x} \eta x \Delta^{(c+b-1)/2}$$

$$d = \dim \mathbb{L}_{\mathbb{R}} = r(1 + a(r-1) + c + b)$$

$$\sqrt{x} \eta x \Delta^{(c+b-1)/2} \text{Aut}(X) \text{inv}$$

$$\bigwedge_x^{\Omega} \sqrt{x} \Delta_{\mathbb{C}} \Delta_{\sqrt{x}} = e^{-x \Delta} = e^{-x \Delta} r_{\mathbb{C}}/r$$

$$\sqrt{x} \Delta_{\mathbb{C}} \Delta_{\sqrt{x}}^{p_{\mathbb{C}}/2} = e^{-x \Delta} p_{\mathbb{C}} r_{\mathbb{C}}/2r = e^{-x \Delta} \dim(X \times Y)/r + \dim V/2r = e^{-x \Delta} 1 + a(r-1) + c + b/2$$

$$e^{-\sum_j \sqrt{x_j} e_j \Delta} = \prod_j (1 - x_j)$$

$$\int_{d\zeta}^{\mathbb{L}_{\mathbb{R}}} \zeta \eta = \int_{d\zeta}^{D_{\mathbb{R}}} \zeta \eta = C \int_{\downarrow_{\zeta}^0}^{D_{\mathbb{R}}} \zeta \eta \Delta_{\mathbb{C}} \Delta_{\zeta}^{p_{\mathbb{C}}/2} = C \int_{dx_1 \dots dx_r}^{0|1^r} \sum_j \sqrt{x_j} e_j \eta \prod_{i < j} \overline{x_j - x_i}^a \prod_j x_j^{(c+b-1)/2}$$

$$= C \int_{dx_1 \dots dx_r}^{\mathbb{R}_+^r} \prod_{i < j} \sum_j \sqrt{x_j} e_j \eta \overline{x_j - x_i}^a \prod_j x_j^{(c+b-1)/2} = C \int_{dx}^{\Omega} \sqrt{x} \eta x \Delta^{(c+b-1)/2}$$

$$\text{homogeneity} \Rightarrow \bigwedge \eta \in K_{\mathbb{R}} \setminus \mathbb{L}_{\mathbb{R}} \Delta_{\mathbb{C}} \mathbb{C}$$

$$\pi^{d/2}/C = C^{-1} \int_{d\zeta}^{\mathbb{L}_{\mathbb{R}}} e^{-\zeta|\zeta} = \int_{dx}^{\Omega} e^{-\sqrt{x}|\sqrt{x}} x \Delta^{(c+b-1)/2} = \int_{dx}^{\Omega} e^{-e|x} x \Delta^{-\dim X/r} x \Delta^{1 + a(r-1)/2 + (c+b-1)/2}$$

$$= \int_{dx}^{\Omega} x \Delta^{-\dim X/r} e^{-e|x} x \Delta^{(1 + a(r-1) + c + b)/2} = \Gamma_{(1 + a(r-1) + c + b)/2}^{\Omega} = \Gamma_{d/2r}^{\Omega} \Rightarrow C = \frac{\pi^{d/2}}{\Gamma_{d/2r}^{\Omega}}$$