$$Z_1^{\mathbb{C}} = \overbrace{\mathbb{C}_r \times \mathbb{C}_r} \ulcorner \mathbb{C}^{\complement}$$

$$\xi{:}\eta \sim \vartheta\xi{:}\eta/\bar{\vartheta}$$

$$\overbrace{\eta/\bar{\vartheta}}^{*}\,\overbrace{\vartheta\xi} = \overset{*}{\eta}\,\vartheta^{-1}\vartheta\xi = \overset{*}{\eta}\,\xi$$

$$S_1^{\mathbb{C}} = \overbrace{\mathbb{S}_{2r-1} \times \mathbb{S}_{2r-1}} \ulcorner \mathbb{C}^{\mathrm{U}}$$

$$\varphi{:}\psi \sim \vartheta\varphi{:}\vartheta\psi$$

$$\overbrace{\vartheta\psi}^{*}\,\overbrace{\vartheta\varphi} = \overset{*}{\psi}\,\bar{\vartheta}\,\vartheta\varphi = \overset{*}{\psi}\,\varphi$$

$$x = \overset{*}{\eta}\,\xi: \quad y = \overset{*}{\tau}\,\sigma: \quad c = \overset{*}{\beta}\,\alpha$$

$$x \barwedge c = \operatorname{tr} x\overset{*}{c} = \operatorname{tr} \overset{*}{\eta}\,\xi\,\overset{*}{\alpha}\,\beta = \underbrace{\xi\overset{*}{\alpha}}\,\underbrace{\beta\overset{*}{\eta}}: \quad y \barwedge c = \operatorname{tr} y\overset{*}{c} = \operatorname{tr} \overset{*}{\tau}\,\sigma\,\overset{*}{\alpha}\,\beta = \underbrace{\sigma\overset{*}{\alpha}}\,\underbrace{\beta\overset{*}{\tau}}$$

$$x \barwedge y = \operatorname{tr} x\overset{*}{y} = \operatorname{tr} \overset{*}{\eta}\,\xi\,\overset{*}{\sigma}\,\tau = \underbrace{\xi\overset{*}{\sigma}}\,\underbrace{\tau\overset{*}{\eta}}$$

$$\overbrace{\xi\overset{*}{\alpha}}^{m} = \int\limits_{d\sigma}^{\mathbb{C}^n} \mathfrak{e}^{\xi\overset{*}{\sigma}}\,\mathfrak{e}^{-\sigma\overset{*}{\sigma}}\,\overbrace{\sigma\overset{*}{\alpha}}^{m} = \int\limits_{ds}^{\mathbb{R}^>} s^{n-1}\,\mathfrak{e}^{-s^2} \int\limits_{d\varphi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{s\xi\overset{*}{\varphi}}\,\overbrace{s\varphi\overset{*}{\alpha}}^{m}$$

$$\overbrace{\beta\overset{*}{\eta}}^{m} = \overset{m}{\overline{\eta\overset{*}{\beta}}} = \overline{\int\limits_{d\tau}^{\mathbb{C}^n} \mathfrak{e}^{\eta\overset{*}{\tau}}\mathfrak{e}^{-\tau\overset{*}{\tau}}\,\overbrace{\tau\overset{*}{\beta}}^{m}} = \int\limits_{d\tau}^{\mathbb{C}^n} \mathfrak{e}^{\tau\overset{*}{\eta}}\,\mathfrak{e}^{-\tau\overset{*}{\tau}}\,\overbrace{\beta\overset{*}{\tau}}^{m} = \int\limits_{dt}^{\mathbb{R}^>} t^{n-1}\,\mathfrak{e}^{-t^2} \int\limits_{d\psi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{t\psi\overset{*}{\eta}}\,\overbrace{t\beta\overset{*}{\psi}}^{m}$$

$$\sigma = s\varphi: \quad \tau = t\psi$$

$$u = \overset{*}{\psi}\,\varphi: \quad y = stu$$

$$\int\limits_{d\varphi}^{\mathbb{S}^{2n-1}} \int\limits_{d\psi}^{\mathbb{S}^{2n-1}} F(\varphi{:}\psi) = \int\limits_{d\underbrace{\overset{*}{\psi}\varphi}}^{S_1} \int\limits_{d\vartheta}^{\mathbb{C}^{\mathrm{U}}} F(\vartheta\varphi{:}\vartheta\psi)$$

$$r = st \Longrightarrow dr = sdt$$

$$\int\limits_{ds}^{\mathbb{R}^>} s^k\,\mathfrak{e}^{-s^2} \int\limits_{dt}^{\mathbb{R}^>} t^k\,\mathfrak{e}^{-t^2} = \int\limits_{ds}^{\mathbb{R}^>} \mathfrak{e}^{-s^2} \int\limits_{dr}^{\mathbb{R}^>} r^k\,\mathfrak{e}^{-r^2/s^2}/s = \int\limits_{dr}^{\mathbb{R}^>} r^k \int\limits_{ds}^{\mathbb{R}^>} \frac{\mathfrak{e}^{-s^2-r^2/s^2}}{s} = \int\limits_{dr}^{\mathbb{R}^>} r^k\,J(r)$$

$$y = ru$$

$${}^{x}E_{y}^{\mathbb{C}} = \sum_{m} \frac{x \overset{m}{\bowtie} y}{(m!)^{2}}$$

$$\int\limits_{d\vartheta}^{\mathbb{C}^{\mathrm{U}}} \mathfrak{e}^{s\xi\overset{*}{\varphi}\bar{\vartheta}}\ \mathfrak{e}^{t\vartheta\psi\overset{*}{\eta}} = \sum_{h}^{\mathbb{N}} \frac{\overbrace{s\xi\overset{*}{\varphi}}^{h}}{h!} \sum_{k}^{\mathbb{N}} \frac{\overbrace{t\psi\overset{*}{\eta}}^{k}}{k!} \int\limits_{d\vartheta}^{\mathbb{C}^{\mathrm{U}}} \bar{\vartheta}^{h}\ \vartheta^{k} = \sum_{k}^{\mathbb{N}} \frac{\overbrace{\underbrace{s\xi\overset{*}{\varphi}}\underbrace{t\psi\overset{*}{\eta}}}^{k}}{(k!)^{2}} = \sum_{k}^{\mathbb{N}} x \overset{k}{\bowtie} u \frac{\overbrace{st}^{k}}{(k!)^{2}}$$

$$\int\limits_{d\varphi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{s\xi\overset{*}{\varphi}}\ \overbrace{\varphi\overset{*}{\alpha}}^{m} \int\limits_{d\psi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{t\psi\overset{*}{\eta}}\ \overbrace{\beta\overset{*}{\psi}}^{m} = \int\limits_{du}^{S_{1}} \int\limits_{d\vartheta}^{\mathbb{C}^{\mathrm{U}}} \mathfrak{e}^{s\xi\overset{*}{\varphi}\bar{\vartheta}}\ \overbrace{\vartheta\varphi\overset{*}{\alpha}}^{m}\ \mathfrak{e}^{t\vartheta\psi\overset{*}{\eta}}\ \overbrace{\beta\overset{*}{\psi}\bar{\vartheta}}^{m}$$

$$= \int\limits_{du}^{S_{1}} \overbrace{\varphi\overset{*}{\alpha}}^{m}\ \overbrace{\beta\overset{*}{\psi}}^{m} \int\limits_{d\vartheta}^{\mathbb{C}^{\mathrm{U}}} \mathfrak{e}^{s\xi\overset{*}{\varphi}\bar{\vartheta}}\ \mathfrak{e}^{t\vartheta\psi\overset{*}{\eta}} = \int\limits_{du}^{S_{1}} u \overset{m}{\bowtie} c \int\limits_{d\vartheta}^{\mathbb{C}^{\mathrm{U}}} \mathfrak{e}^{s\xi\overset{*}{\varphi}\bar{\vartheta}}\ \mathfrak{e}^{t\vartheta\psi\overset{*}{\eta}} = \sum_{k}^{\mathbb{N}} \frac{\overbrace{st}^{k}}{(k!)^{2}} \int\limits_{du}^{S_{1}} \underbrace{x \overset{k}{\bowtie} u}\, \underbrace{u \overset{m}{\bowtie} c}$$

$$x \overset{m}{\bowtie} c = \overbrace{\xi\overset{*}{\alpha}}^{m}\ \overbrace{\beta\overset{*}{\eta}}^{m} = \int\limits_{d\sigma}^{\mathbb{C}^{n}} \mathfrak{e}^{\xi\overset{*}{\sigma}}\ \mathfrak{e}^{-\sigma\overset{*}{\sigma}}\ \overbrace{\sigma\overset{*}{\alpha}}^{m} \int\limits_{d\tau}^{\mathbb{C}^{n}} \mathfrak{e}^{\tau\overset{*}{\eta}}\ \mathfrak{e}^{-\tau\overset{*}{\tau}}\ \overbrace{\beta\overset{*}{\tau}}^{m} = \int\limits_{d\sigma}^{\mathbb{C}^{n}} \int\limits_{d\tau}^{\mathbb{C}^{n}} \mathfrak{e}^{-\sigma\overset{*}{\sigma}}\ \mathfrak{e}^{-\tau\overset{*}{\tau}}\ \mathfrak{e}^{\xi\overset{*}{\sigma}}\ \mathfrak{e}^{\tau\overset{*}{\eta}}\ \overbrace{\underbrace{\sigma\overset{*}{\alpha}}\underbrace{\beta\overset{*}{\tau}}}^{m}$$

$$= \int\limits_{ds}^{\mathbb{R}^{>}} s^{n-1}\ \mathfrak{e}^{-s^{2}} \int\limits_{dt}^{\mathbb{R}^{>}} t^{n-1}\ \mathfrak{e}^{-t^{2}} \int\limits_{d\varphi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{s\xi\overset{*}{\varphi}}\ \overbrace{s\varphi\overset{*}{\alpha}}^{m} \int\limits_{d\psi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{t\psi\overset{*}{\eta}}\ \overbrace{t\beta\overset{*}{\psi}}^{m}$$

$$= \int\limits_{ds}^{\mathbb{R}^{>}} s^{m+n-1}\ \mathfrak{e}^{-s^{2}} \int\limits_{dt}^{\mathbb{R}^{>}} t^{m+n-1}\ \mathfrak{e}^{-t^{2}} \int\limits_{d\varphi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{s\xi\overset{*}{\varphi}}\ \overbrace{\varphi\overset{*}{\alpha}}^{m} \int\limits_{d\psi}^{\mathbb{S}^{2n-1}} \mathfrak{e}^{t\psi\overset{*}{\eta}}\ \overbrace{\beta\overset{*}{\psi}}^{m}$$

$$= \sum_{k}^{\mathbb{N}} \int\limits_{ds}^{\mathbb{R}^{>}} s^{n-1}\ \mathfrak{e}^{-s^{2}} \int\limits_{dt}^{\mathbb{R}^{>}} t^{n-1}\ \mathfrak{e}^{-t^{2}} \frac{\overbrace{st}^{k}}{(k!)^{2}} \int\limits_{du}^{S_{1}} \underbrace{x \overset{k}{\bowtie} u}\, \underbrace{u \overset{m}{\bowtie} c}$$

$$= \sum_{k}^{\mathbb{N}} \int\limits_{dr}^{\mathbb{R}^{>}} \frac{r^{k+m+n-1}}{(k!)^{2}} J(r) \int\limits_{du}^{S_{1}} \underbrace{x \overset{k}{\bowtie} u}\, \underbrace{u \overset{m}{\bowtie} c} = \int\limits_{dy}^{Z_{1}} J\left(\sqrt{y \bowtie y}\right) y \overset{N}{\bowtie} y \sum_{k} \frac{x \overset{k}{\bowtie} y}{(k!)^{2}} \underbrace{y \overset{m}{\bowtie} c}$$