

$${}^0\widehat{\mathcal{P}_\nu \mathsf{J}} = \int\limits_{dy}^{\pi^{-1}(0)} {}^y_{\mathbb{C}}\Delta_y^\nu - {}^p_{\mathbb{C}}\overline{\Delta}_{y^2}^{-\nu} \overbrace{{}^y_{\underline{\gamma}}(0:y)}^y \mathsf{J}$$

$$\begin{array}{c} {}_{\mathbb{C}}B \xrightarrow[\mathbb{R} \text{ lin}]{} {}_{\mathbb{C}}B \\ K_{\mathbb{R}} \not\propto \Lambda = 0 \end{array}$$

$$\pi^{-1}(0) = {}_{\mathbb{R}}B\Lambda = \begin{cases} z \in {}_{\mathbb{C}}Z \\ \frac{\varrho}{z}\Lambda^{-1} = z\bar{\Lambda}^{-1} \end{cases}$$

$$\begin{array}{ccc} \pi^{-1}(0) & & \\ \uparrow & \searrow \mathsf{J} & \\ \Lambda & & \mathbb{C} \\ & \nearrow \mathsf{I} & \\ {}_{\mathbb{R}}B & & \end{array}$$

$$E_{\mathbb{R}}^\mu \mathsf{I} = c_\kappa^\mu \partial_{\mathbb{R}}^\kappa \mathsf{I}$$

$$\partial_{\mathbb{R}} = \partial_{\mathbb{C}} + \bar{\partial}_{\mathbb{C}} \Rightarrow \partial_{\mathbb{R}}^n = \overbrace{\partial_{\mathbb{C}} + \bar{\partial}_{\mathbb{C}}}^n = \begin{bmatrix} n \\ m \end{bmatrix} \partial_{\mathbb{C}}^m \bar{\partial}_{\mathbb{C}}^{n-m} \Rightarrow \partial_{\mathbb{R}}^\kappa = \sum_{\sigma + \tau = \kappa} \begin{bmatrix} \kappa \\ \sigma : \tau \end{bmatrix} \partial_{\mathbb{C}}^\sigma \bar{\partial}_{\mathbb{C}}^\tau$$

$$E_{\mathbb{C}}^\mu \mathsf{J} = {}_\sigma c_\tau^\mu \partial_{\mathbb{C}}^\sigma \bar{\partial}_{\mathbb{C}}^\tau \mathsf{J}$$

$$\partial_{\mathbb{C}}^\sigma \bar{\partial}_{\mathbb{C}}^\tau \underline{\Lambda \ltimes \mathsf{J}} = {}_\alpha^\sigma \Lambda_\beta^\tau \partial_{\mathbb{C}}^\alpha \bar{\partial}_{\mathbb{C}}^\beta \mathsf{J}$$

$${}_\alpha P_\beta^\mu = {}_\sigma c_\tau^\mu {}_\alpha^\sigma \Lambda_\beta^\tau \Rightarrow E_{\mathbb{C}}^\mu \underline{\Lambda \ltimes \mathsf{J}} = {}_\alpha P_\beta^\mu \partial_{\mathbb{C}}^\alpha \bar{\partial}_{\mathbb{C}}^\beta \mathsf{J}: \quad K_{\mathbb{R}} \text{ inv}$$

$$\text{LHS} = {}_\sigma c_\tau^\mu \partial_{\mathbb{C}}^\sigma \bar{\partial}_{\mathbb{C}}^\tau \underline{\Lambda \ltimes \mathsf{J}} = {}_\sigma c_\tau^\mu {}_\alpha^\sigma \Lambda_\beta^\tau \partial_{\mathbb{C}}^\alpha \bar{\partial}_{\mathbb{C}}^\beta \mathsf{J} = \text{RHS}$$

$$\mathbb{R}^B \mathop{\bowtie}_{\infty} \mathbb{C} \xleftarrow[G_{\mathbb{R}} \text{ inv}]{} {}_{\mathbb{C}}^B \mathop{\bowtie}_{\infty} \mathbb{C}: \quad {}^x \widehat{\mathcal{P}^\mu \mathsf{J}} = {}^0 \widehat{E_{\mathbb{C}}^\mu \Lambda \overbrace{\gamma_x \ltimes \mathsf{J}}}$$

$${}^0 \widehat{\partial_{\mathbb{C}}^\alpha \gamma_x \ltimes \mathsf{I}} = \sum_{\iota \leqslant \alpha} {}^x \gamma_\iota^\alpha \, {}^x \widehat{\partial_{\mathbb{C}}^\iota \mathsf{I}}$$

$$\mathbb{R}^B \Delta_{\infty} \mathbb{C} \xleftarrow{\mathcal{P}_{\varkappa}^{\mu}} \mathbb{C}^B \Delta_{\omega} \mathbb{C}: \quad {}^x \widehat{\mathcal{P}_{\varkappa}^{\mu} \mathfrak{f}} = {}_{\alpha} P_{\beta}^{\mu} {}^x \gamma_{\iota}^{\alpha} {}^x \widehat{\partial_{\mathbb{C}}^{\iota} \mathfrak{f}} {}^x \bar{\gamma}_{\varkappa}^{\beta} = {}_{\alpha} P_{\beta}^{\mu} \underbrace{{}^0 \widehat{\partial_{\mathbb{C}}^{\alpha} \gamma_x \mathbf{x} \mathfrak{f}}} {}^x \bar{\gamma}_{\varkappa}^{\beta}$$

$${}^x \widehat{\mathcal{P}^{\mu} \bar{\mathfrak{f}}} = {}^x \widehat{\partial_{\mathbb{C}}^{\varkappa} \mathfrak{f}} {}^x \widehat{\mathcal{P}_{\varkappa}^{\mu} \mathfrak{f}}$$

$$\text{LHS} = \underbrace{{}^0 \widehat{E_{\mathbb{C}}^{\mu} \Lambda \gamma_x \mathbf{x} \bar{\mathfrak{f}}}} = {}_{\alpha} P_{\beta}^{\mu} \underbrace{{}^0 \widehat{\partial_{\mathbb{C}}^{\alpha} \bar{\partial}_{\mathbb{C}}^{\beta} \gamma_x \mathbf{x} \bar{\mathfrak{f}}}} = {}_{\alpha} P_{\beta}^{\mu} \underbrace{{}^0 \widehat{\partial_{\mathbb{C}}^{\alpha} \gamma_x \mathbf{x} \mathfrak{f}}} \underbrace{{}^0 \widehat{\partial_{\mathbb{C}}^{\beta} \gamma_x \mathbf{x} \mathfrak{f}}} = {}_{\alpha} P_{\beta}^{\mu} {}^x \gamma_{\iota}^{\alpha} {}^x \widehat{\partial_{\mathbb{C}}^{\iota} \mathfrak{f}} {}^x \bar{\gamma}_{\varkappa}^{\beta} {}^x \widehat{\partial_{\mathbb{C}}^{\varkappa} \mathfrak{f}} = \text{RHS}$$

$$\mathbb{R}^B \Delta_{\infty} \mathbb{C} \xleftarrow{\varrho^{\mu}} \mathbb{C}^B \Delta_{\omega} \mathbb{C}: \quad {}^x \widehat{\varrho^{\mu} \mathfrak{f}} = {}_{\mathbb{R}} \Delta_x^p \underbrace{{}^x \widehat{(-\partial_{\mathbb{R}})^{\varkappa} {}_{\mathbb{R}} \Delta_x^{-p} \mathcal{P}_{\varkappa}^{\mu} \mathfrak{f}}}$$

$$\int \frac{{}^x \Delta_x^{\nu-p} {}^x \bar{\mathfrak{f}}}{{}^x \widehat{\varrho^{\mu} \mathfrak{f}}} dx = \int \frac{{}^x \Delta_x^{-p} {}^x \widehat{\mathcal{P}^{\mu} \bar{\mathfrak{f}} / I_{\nu}}}{dx}$$

$$\begin{aligned} \text{LHS} &= \int \frac{{}^x \Delta_x^{-p} {}^x \bar{\mathfrak{f}} / I_{\nu}}{{}^x \widehat{\varrho^{\mu} \mathfrak{f}}} dx = \int \frac{{}^x \bar{\mathfrak{f}} / I_{\nu}}{{}^x \widehat{(-\partial_{\mathbb{R}})^{\varkappa} {}_{\mathbb{R}} \Delta_x^{-p} \mathcal{P}_{\varkappa}^{\mu} \mathfrak{f}}} dx \\ &= \int \frac{{}^x \partial_{\mathbb{R}}^{\varkappa} \bar{\mathfrak{f}} / I_{\nu}}{{}^x \widehat{\mathcal{P}_{\varkappa}^{\mu} \mathfrak{f}}} dx = \int \frac{{}^x \partial_{\mathbb{C}}^{\varkappa} \bar{\mathfrak{f}} / I_{\nu}}{{}^x \widehat{\mathcal{P}_{\varkappa}^{\mu} \mathfrak{f}}} dx = \text{RHS} \end{aligned}$$

$$\mathbb{R}^B \Delta_{\infty} \mathbb{C} \xleftarrow[G_{\mathbb{R}} \text{ inv}]{} \mathbb{C}^B \Delta_{\omega} \mathbb{C}$$

$${}^0 \widehat{\mathcal{P}_{\nu} \bar{\Lambda}^1 \mathbf{x} \mathfrak{1}} = \frac{1}{(\nu)_{\mu}} {}^0 \widehat{E_{\mathbb{R}}^{\mu} \mathfrak{1}}: \quad {}^0 \widehat{\mathcal{P}_{\nu} \mathfrak{J}} = \frac{1}{(\nu)_{\mu}} {}^0 \widehat{E_{\mathbb{C}}^{\mu} \Lambda \mathbf{x} \mathfrak{J}}$$

$$\mathcal{P}_{\nu} \mathfrak{J} = \frac{1}{(\nu)_{\mu}} \mathcal{P}^{\mu} \mathfrak{J}$$

$${}^x \text{LHS} \underset{\text{inv}}{=} {}^0 \widehat{\mathcal{P}_{\nu} \gamma_x \mathbf{x} \mathfrak{J}} = \frac{1}{(\nu)_{\mu}} {}^0 \widehat{E_{\mathbb{C}}^{\mu} \Lambda \gamma_x \mathbf{x} \mathfrak{J}} = {}^x \text{RHS}$$

$$\varrho_\nu\,\mathfrak{T}=\frac{1}{(\nu)_\mu}\varrho^\mu\,\mathfrak{T}$$

$$\int\limits_{dx}^{\mathbb{R}^B}{}_x\Delta_x^{\nu-p}\, {}^x\bar{\gamma}\, {}^x\widehat{\varrho_\nu\mathfrak{T}}=\int\limits_{dx}^{\mathbb{R}^B}{}_x\Delta_x^{-p}\, {}^x\widehat{\mathcal{P}_\nu\overline{\gamma/I_\nu}\mathfrak{T}}=\frac{1}{(\nu)_\mu}\int\limits_{dx}^{\mathbb{R}^B}{}_x\Delta_x^{-p}\, {}^x\widehat{\mathcal{P}^\mu\overline{\gamma/I_\nu}\mathfrak{T}}=\frac{1}{(\nu)_\mu}\int\limits_{dx}^{\mathbb{R}^B}{}_x\Delta_x^{\nu-p}\, {}^x\bar{\gamma}\, {}^x\widehat{\varrho^\mu\mathfrak{T}}$$

$${}^0\widehat{\varrho^\mu\mathfrak{T}}=\overbrace{(-\partial_{\mathbb{R}})}^0\!\!\!\underbrace{{}_{\mathbb{R}}\!\!\!{}^x\Delta_x^{-p}\mathcal{P}^\mu_{\boldsymbol{\varkappa}}\mathfrak{T}}_{\boldsymbol{\varkappa}}= {}_{\mathbb{R}}K\,\mathbin{\textup{\texttt{x}}}\,\mathfrak{T}$$

$$\begin{aligned}y_{-x} &= \overbrace{1+y\overset{*}{x}}^{-1}y = \overbrace{1+y\overset{*}{x}}^{-1}y\underbrace{1+\overset{*}{x}y}_{1+\overset{*}{x}y} \overbrace{1+\overset{*}{x}y}^{-1} = \underbrace{y+xQ_y}_{y}^{-y}B_x^{-1}\\y_{-x}^{x}B_x^{1/2} &= \underbrace{y+xQ_y}_{y}^{-y}B_x^{-1}{}^xB_x^{1/2}\end{aligned}$$

$$\partial_{u_j^\lambda}\left(\underbrace{y_{-x}^{x}B_x^{1/2}}_{y-x}u_i^\mu\right)=u_j^\lambda\,\mathbin{\textup{\texttt{x}}}\,\left(\underbrace{y_{-x}^{x}B_x^{1/2}}_{y-x}u_i^\mu\right)=u_j^\lambda\,\mathbin{\textup{\texttt{x}}}\,\underbrace{y_{-x}^{x}B_x^{1/2}\,\mathbin{\textup{\texttt{x}}} u_i^\mu}_{y-x}$$

$$\underbrace{y\mathfrak{g}_x\,\mathbin{\textup{\texttt{x}}}\,\mathfrak{T}}_{y\mathfrak{g}_x\,\mathfrak{T}}=\underbrace{y\mathfrak{g}_x\mathfrak{T}}_{y\mathfrak{g}_x\mathfrak{T}}=\underbrace{y_{-x}^{x}B_x^{1/2}+x}_{y_{-x}^{x}B_x^{1/2}}\mathfrak{T}=\underbrace{y_{-x}^{x}B_x^{1/2}}_{y_{-x}^{x}B_x^{1/2}}u_i^\mu{}^x\widehat{\partial_{u_i^\mu}\mathfrak{T}}$$

$${}^0\widehat{\partial^\sigma\gamma_x\,\mathbin{\textup{\texttt{x}}}\,\mathfrak{T}}=\partial^\sigma\left(\underbrace{y_{-x}^{x}B_x^{1/2}}_{y-x}u_i^\mu{}^x\widehat{\partial_{u_i^\mu}\mathfrak{T}}\right)=\partial^\sigma\left(\underbrace{y_{-x}^{x}B_x^{1/2}}_{y-x}u_i^\mu\right){}^x\widehat{\partial_{u_i^\mu}\mathfrak{T}}$$

$${}^0\widehat{\partial_{u_j^\lambda}\gamma_x\,\mathbin{\textup{\texttt{x}}}\,\mathfrak{T}}=\partial_{u_j^\lambda}\left(\underbrace{y_{-x}^{x}B_x^{1/2}}_{y-x}u_i^\mu{}^x\widehat{\partial_{u_i^\mu}\mathfrak{T}}\right)=\partial_{u_j^\lambda}\left(\underbrace{y_{-x}^{x}B_x^{1/2}}_{y-x}u_i^\mu\right){}^x\widehat{\partial_{u_i^\mu}\mathfrak{T}}$$