

$${}^y\gamma_x = y_{-x} {}^x B_x^{1/2} + x$$

$$\dot{x} : \dot{y} \overline{\gamma(0:y)} = \dot{x} + \dot{y} - y \dot{x} y$$

$$\dot{y} = -y \Rightarrow \overline{\dot{y} \dot{x} \dot{y}} = \overline{\dot{y} \dot{x} \dot{y}} = \overline{-y \dot{x} -y} = y \dot{x} y \Rightarrow \dot{x} + \dot{y} - y \dot{x} y = \overline{\dot{x} - y \dot{x} y} + \dot{y} = \dot{x} : \dot{y} \frac{I - Q_y}{0} \Big| \frac{0}{I}$$

$$\Rightarrow \overline{\gamma(0:y)} = \overline{\frac{I - Q_y}{0} \Big| \frac{0}{I}} = \overline{I - Q_y}$$

$$w = u + v = y_{-x} {}^x B_x^{1/2} + x$$

$$\dot{x} {}^0 : \dot{y} \underline{w} = \dot{x} - y \dot{x} y \Rightarrow \begin{cases} \dot{x} {}^0 : \dot{y} \underline{u} = \dot{x} - y \dot{x} y \\ \dot{x} {}^0 : \dot{y} \underline{v} = 0 \end{cases}$$

$$\dot{y} {}^0 : \dot{y} \underline{w} = \dot{y} \Rightarrow \begin{cases} \dot{y} {}^0 : \dot{y} \underline{u} = 0 \\ \dot{y} {}^0 : \dot{y} \underline{v} = \dot{y} \end{cases}$$

$$y_{-x} {}^x B_x^{1/2} = \underline{u - x} + v$$

$$y_{-x} = \overline{\underline{u - x} + v} {}^x B_x^{-1/2} = \underline{u - x} {}^x B_x^{-1/2} + v {}^x B_x^{-1/2}$$

$$\underline{u - x} {}^x B_x^{-1/2} = y_{-x} \frac{1}{2} \overline{\dot{y}_{-x}} = -x Q_y {}^y B_{-x}^{-1} \Rightarrow u = x - x Q_y {}^y B_{-x}^{-1} {}^x B_x^{1/2}$$

$$v {}^x B_x^{-1/2} = y_{-x} \frac{1}{2} \overline{\dot{y}_{-x}} = y {}^y B_{-x}^{-1} \Rightarrow v = y {}^y B_{-x}^{-1} {}^x B_x^{1/2}$$

$$y_{-x} + \overline{\dot{y}_{-x}} = \overline{\frac{-1}{1 + yx} y - y \frac{-1}{1 - xy}} = \overline{\frac{-1}{1 + yx} y \overline{1 - xy} - \overline{1 + yx} y \frac{-1}{1 - xy}}$$

$$= -2 \overline{\frac{-1}{1 + yx} y x y \frac{-1}{1 - xy}} = -2x Q_y {}^y B_{-x}^{-1}$$

$$y_{-x} - \overline{\dot{y}_{-x}} = \overline{\frac{-1}{1 + yx} y + y \frac{-1}{1 - xy}} = \overline{\frac{-1}{1 + yx} y \overline{1 - xy} + \overline{1 + yx} y \frac{-1}{1 - xy}}$$

$$= 2 \overline{\frac{-1}{1 + yx} y \frac{-1}{1 - xy}} = 2y {}^y B_{-x}^{-1}$$

$$y_{-x} {}^x B_x^{1/2} + x \pi = {}^y \gamma_x \pi = {}^{y\pi} \gamma_x = {}^0 \gamma_x = x$$



$$(1 + \zeta) \zeta \overline{\mathcal{P}F} = \int_{dt}^{\mathbb{R}} \frac{1+it}{-1} \zeta + it F$$

$$\begin{array}{ccc} B_c \begin{array}{|c} \mathbb{C} \\ \hline \mathbb{C} \end{array} & \xleftarrow{\frac{c}{s} \mid \frac{s}{c}} & B_c \begin{array}{|c} \mathbb{C} \\ \hline \mathbb{C} \end{array} \\ \mathcal{P} \downarrow & & \downarrow \mathcal{P} \\ B^{\mathbb{R}} \begin{array}{|c} \mathbb{C} \\ \hline \mathbb{C} \end{array} & \xleftarrow{\frac{c}{s} \mid \frac{s}{c}} & B^{\mathbb{R}} \begin{array}{|c} \mathbb{C} \\ \hline \mathbb{C} \end{array} \end{array}$$

$$\frac{\zeta + it}{1 + it} \frac{c}{s} \mid \frac{s}{c} = \overbrace{c + \frac{-1}{1 + it} s} \frac{\zeta + it}{s + \frac{\zeta + it}{1 + it} c} = \frac{s \overline{1 + it} + \zeta + it c}{c \overline{1 + it} + \zeta + it s} = \frac{\overline{s + \zeta c} + it \overline{s + c}}{\overline{c + \zeta s} + it \overline{s + c}}$$

$$1 + \zeta \frac{c}{s} \mid \frac{s}{c} = 1 + \overbrace{c + \zeta s}^{-1} \frac{s + \zeta c}{s + \zeta c} = \overbrace{c + \zeta s}^{-1} \frac{c + \zeta s + s + \zeta c}{c + \zeta s + s + \zeta c} = \overbrace{c + \zeta s}^{-1} \frac{c + s}{c + s} \frac{1 + \zeta}{1 + \zeta}$$

$$\vartheta = \frac{s + c}{c + \zeta s} t$$

$$\frac{d\vartheta}{dt} = \frac{s + c}{c + \zeta s} = \frac{1 + \zeta \frac{c}{s} \mid \frac{s}{c}}{1 + \zeta}$$

$$\frac{\zeta \frac{c}{s} \mid \frac{s}{c} + i\vartheta}{1 + i\vartheta} = \frac{\overbrace{c + \zeta s}^{-1} \frac{s + \zeta c}{s + \zeta c} + i\vartheta}{1 + i\vartheta} = \frac{\overline{s + \zeta c} + i\vartheta \overline{c + \zeta s}}{\overline{c + \zeta s} + i\vartheta \overline{c + \zeta s}} = \frac{\overline{s + \zeta c} + it \overline{c + s}}{\overline{c + \zeta s} + it \overline{c + s}} = \frac{\zeta + it}{1 + it} \frac{c}{s} \mid \frac{s}{c}$$

$$\zeta \frac{c}{s} \mid \frac{s}{c} \overline{\mathcal{P}F} = \int_{dt}^{\mathbb{R}} \frac{d\vartheta}{1 + \zeta \frac{c}{s} \mid \frac{s}{c} \frac{1+i\vartheta}{-1} \zeta \frac{c}{s} \mid \frac{s}{c} + i\vartheta} F = \int_{dt}^{\mathbb{R}} \frac{dt}{1 + \zeta \frac{\zeta + it}{1 + it} \frac{c}{s} \mid \frac{s}{c}} F = \mathcal{P} \overbrace{\frac{c}{s} \mid \frac{s}{c}}^{\zeta} \times F$$

$$\int_{dz}^{B_{\mathbb{C}}} \overbrace{1 - z\bar{z}}^{-2} z \gamma = \int_{dx}^{B_{\mathbb{R}}} \overbrace{1 - x^2}^{-1} \int_{dy}^{-1|1} \frac{1 + y^2}{(1 - y^2)^2} x + iy/1 + ixy \gamma$$

$$z = u + iv = \frac{x + iy}{1 + ixy} = \frac{iy}{x} \Big| \frac{x}{1} \Rightarrow \begin{cases} z_x = \frac{1 + y^2}{(1 + ixy)^2} \\ z_y = i \frac{1 - x^2}{(1 + ixy)^2} \end{cases}$$

$$\begin{aligned} \frac{u_x}{u_y} \Big| \frac{v_x}{v_y} \Big| \frac{1}{i} \Big| \frac{1}{-i} &= \frac{z_x}{z_y} \Big| \frac{\bar{z}_x}{\bar{z}_y} = \frac{\frac{1 + y^2}{(1 + ixy)^2}}{i \frac{1 - x^2}{(1 + ixy)^2}} \Big| \frac{\frac{1 + y^2}{(1 - ixy)^2}}{-i \frac{1 - x^2}{(1 - ixy)^2}} \Rightarrow \overbrace{\frac{u_x}{u_y} \Big| \frac{v_x}{v_y}} = \frac{(1 - x^2)(1 + y^2)}{(1 + x^2y^2)^2} \\ 1 - \frac{x + iy}{1 + ixy} \Big| \frac{x - iy}{1 - ixy} &= \frac{(1 - x^2)(1 - y^2)}{1 + x^2y^2} \\ \Rightarrow \overbrace{1 - \frac{x + iy}{1 + ixy} \Big| \frac{x - iy}{1 - ixy}}^{-2} \overbrace{\frac{u_x}{u_y} \Big| \frac{v_x}{v_y}} &= \frac{(1 + x^2y^2)^2}{(1 - x^2)^2(1 - y^2)^2} \frac{(1 - x^2)(1 + y^2)}{(1 + x^2y^2)^2} = \frac{1 + y^2}{(1 - x^2)(1 - y^2)^2} \end{aligned}$$