

$$G = \mathbb{R}_2^{\mathbb{C}}$$

$$\nu > 1$$

$$\left(\frac{a}{c} \middle| \frac{b}{d} \right) \mathfrak{K}_{\nu} f (z) = \overline{a - cz}^{-\nu} f \left(\frac{dz - b}{a - cz} \right)$$

$$H_{\nu}^2 (\Pi) = \int_{dz}^{\Pi} \overline{\mathcal{I}z}^{\nu} \overline{f(z)}^2$$