

$$\frac{1}{2} \sum_{\gamma \in SL(2;\mathbb{Z})/\Gamma_\infty} \int_{\mathcal{F}} d\mu \, \varphi(\gamma \cdot \tau, \gamma \cdot \bar{\tau}) = \frac{1}{2} \sum_{\gamma \in SL(2;\mathbb{Z})/\Gamma_\infty} \int_{\gamma \mathcal{F}} d\mu \, \varphi(\tau', \bar{\tau}')$$