$$\left\{ (z_1, z_2) \in (\mathbb{C} \setminus \{0\})^2 \, \middle| \, \operatorname{Im} \frac{z_1}{z_2} > 0 \right\} \xrightarrow{\mathcal{D}} \mathcal{B}L_2(\mathbb{Z})$$

$$\downarrow \qquad \qquad \downarrow \qquad \qquad \qquad$$