

$$\begin{array}{ccccc}
 & & \mathbb{C}^{\infty}_{\mathbb{Z}} & \xrightarrow{\square} & \mathbb{C}^{\infty}_{\mathbb{Z}} & \xrightarrow{M^{\sharp}} & \tilde{\Theta} | \mathbb{C}^2_{\mathbb{Z}} \\
 & \nearrow & & & & & \\
 \mathbb{C}^{\infty}_{\mathbb{Z}} & & & \xrightarrow{\square} & \mathbb{C}^{\infty}_{\mathbb{Z}} & & \\
 & \nwarrow & & & & &
 \end{array}$$