cali pair

$$\not{p} \in H^p_{\mathbb{R}}$$

$$\not{\mathbb{R}} \in H^{\mathbb{Z}}_p$$

$$\text{Vol } \not{\mathbb{R}} = \int_{\not{\mathbb{R}}} \not{p}$$

$$3^0_{\mathbb{C}} \supset \begin{cases} 3^{\ell}_{\mathbb{R}} \\ \text{spec Lagr} \end{cases} \sim \begin{cases} e^{i\vartheta}\Omega \\ \Omega \text{ hol 3-form} \end{cases} \Leftrightarrow \begin{cases} 1_{\mathbb{C}} \\ 2_{\mathbb{C}} \end{cases} \text{ hol cycles}$$

$$7^0_{\mathbb{R}} \supset \begin{cases} 3^a_{\mathbb{R}} \\ \text{assoc 3-form } \Omega \end{cases} \Leftrightarrow 4^c_{\mathbb{R}} \text{ coassoc 4-form } *\Omega$$

$$8^0_{\mathbb{R}} \supset 4^{\text{Cay}}_{\mathbb{R}} \sim \Omega \text{ Cay 4-form selfdual}$$

$$T_{3^{\ell}_{\mathbb{R}}} \text{ Defo } = H_1\left(3^{\ell}_{\mathbb{R}}\right) \text{ no sing}$$

$$T_{4^c_{\mathbb{R}}} \text{ Defo } = H^+_2\left(4^c_{\mathbb{R}}\right) \text{ no sing}$$

$$d^0_{\mathbb{C}} \text{ cpt Kahler } c_1\left(d^0_{\mathbb{C}}\right) = 0 \underset{\text{Yau}}{\Longrightarrow} \bigvee \text{ Ricci flat metric}$$

$2^0_{\mathbb{C}}$ reg nc ALE(A1) holonomy $SU_2 \rightsquigarrow \mathbb{C}^2/\mathbb{Z}_2$ sing orbifold limit holonomy $\mathbb{Z}_2 \sqsubset SU_2$