Rem. No co-ori. fiber for $\rho_{3,2}(1)$

Lemma $H^k(CO^*(\tau^0(3,2), \rho^0_{3,2}(2)))$

$$\cong \begin{cases} \mathbb{Z} \ (\text{gen. by } [\tilde{\hat{O}}_0 + \tilde{\hat{O}}_e]) & \underline{k=0} \\ \mathbb{Z} \oplus \mathbb{Z} \ (\text{gen. by } \alpha_1 = -[\tilde{I}^0_0 + \tilde{I}^1_e] = [\tilde{I}^0_e + \tilde{I}^1_0], & \\ \quad \alpha_2 = [-\tilde{I}^0_0 + \tilde{I}^0_e],\ \alpha_3 = [\tilde{I}^1_0 - \tilde{I}^1_e] & \\ \quad \text{with } 2\alpha_1 = \alpha_2 + \alpha_3 \ ) & \underline{k=1} \end{cases}$$

Lemma $f : M^2 \to \mathbb{R}$ stable Morse fct.
(M^2 closed)

$s_1^* \alpha_1 (f) = 0$

$s_1^* \alpha_2 (f) = - s_1^* \alpha_3 (f) = \underline{\max(f)} - \underline{\min(f)}$

in $H_0(\mathbb{R}; \mathbb{Z}) \cong \mathbb{Z}$

Corollary

$\underline{\max(f) - \min(f)}$ is a

<u>cobordism invariant</u> of f