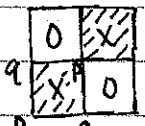
Thursday, April 22, 2010
* Handout given *
Finished discussing grid diagrams.

Ex: 

$\mathbb{O} = \{(1/2, 3/2), (3/2, 1/2)\}$ $p = \{(0,0), (1,1)\}$

$I(\mathbb{O}, \mathbb{O}) = 0$ $I(\mathbb{O}, \mathbb{O}) = 0$

$I(p,p) = 1$ $I(q,q) = 0$

$I(p, \mathbb{O}) = 2$ $I(q, \mathbb{O}) = 2$

$I(\mathbb{O}, p) = 0$ $I(\mathbb{O}, q) = 0$

$M_{\mathbb{O}}(p) = 1 - 2 - 0 + 0 + 1 = 0$ $M_{\mathbb{O}}(q) = -1$

$I(\mathbb{X}, \mathbb{X}) = 1$ $I(\mathbb{X}, \mathbb{X}) = 1$

$I(q,q) = 0$ $I(p,p) = 1$

$I(q, \mathbb{X}) = 2$ $I(p, \mathbb{X}) = 3$

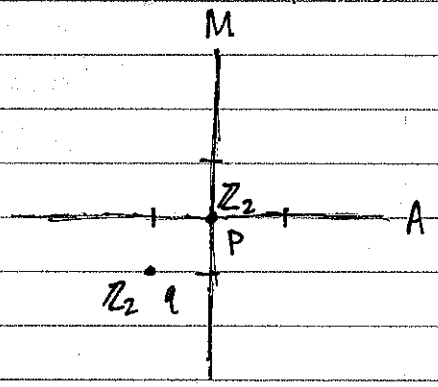
$I(\mathbb{X}, q) = 0$ $I(\mathbb{X}, p) = 1$

$M_{\mathbb{X}}(q) = 0$ $M_{\mathbb{X}}(p) = -1$

$A(q) = \frac{(0-(-1))}{2} - \frac{2-1}{2} = \frac{1}{2}$ $A(p) = \frac{(-1)}{2} - \frac{(2-1)}{2} = \frac{0}{*}$

$\tilde{\partial}(p) = 0$
$\tilde{\partial}(q) = 0$

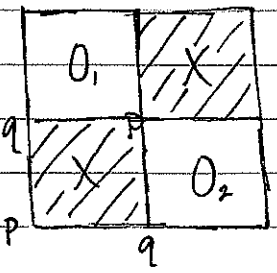
$M(p) = 0$
$M(q) = -1$
$A(p) = 0$
$(q) = -1$



$$C(0,1) \xrightarrow{\partial} C(0,0) \xrightarrow{\partial} C(0,-1)$$
$$0 \longrightarrow \{0, p\} \longrightarrow 0$$
$$\| \quad \mathbb{Z}_2$$
$$\mathbb{Z}_2$$

$$\frac{\ker \partial_0}{\operatorname{Im} \partial_1} = \frac{\langle p \rangle}{0} = \mathbb{Z}_2$$

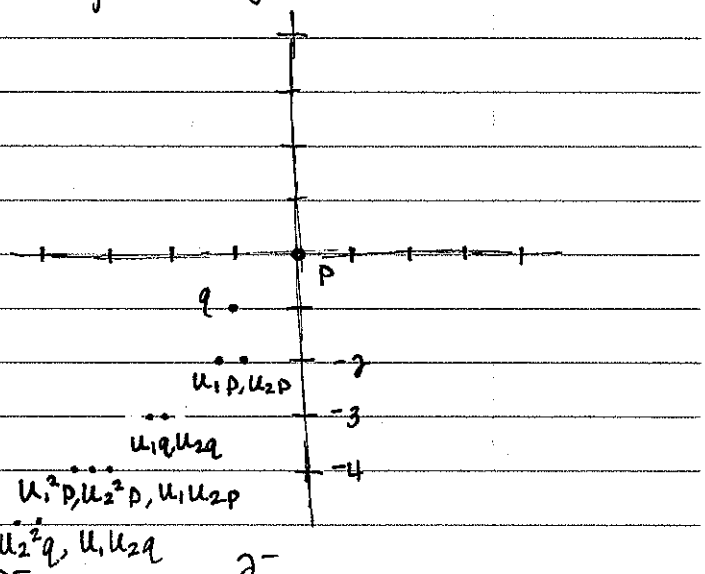
$M(p) = 0$
$M(q) = -1$



$M(u_1, p) = 0 - 2 = -2$
$M(u_1 u_2, q) = -1 - 2(2) = -5$
$M(u_1^5 u_2^2, q) = -1 - 2(7) = -15$

Note: The default subscript for Maslov grading is 0

$\partial^-(p) = 0$
$\partial^-(q) = u_1 p + u_2 p$



$$\mathcal{C}(-1,0) \xrightarrow{\partial^-} \mathcal{C}(-1,-1) \xrightarrow{\partial^-} \mathcal{C}(-1,-2) \xrightarrow{\partial^-} \mathcal{C}(-1,-3)$$

$$0 \longrightarrow \langle q \rangle \xrightarrow[\text{onto}]{|-|} \langle u_1 p, u_2 p \rangle \longrightarrow 0$$

$\partial^- q = \langle u_1 p + u_2 p \rangle$

A mistake here somewhere ??
... we'll return to this later.