

$$\bigoplus_a \mathcal{H} \left( \left( \begin{array}{c} \text{Disk } M \text{ with a hole } a \\ \vdots \\ \text{Disk } N \text{ with boundary point } \hat{a} \end{array} \right) \right) \xrightarrow{\cong} \mathcal{H} \left( \begin{array}{c} \text{Disk } M \text{ with a dashed circle } N \\ \vdots \\ \text{Boundary point} \end{array} \right)$$

The diagram illustrates an isomorphism between two spaces of configurations. On the left, a direct sum  $\bigoplus_a \mathcal{H}$  is shown, where each  $\mathcal{H}$  contains configurations of a disk  $M$  with a hole at point  $a$  and a disk  $N$  with a point at  $\hat{a}$ . On the right,  $\mathcal{H}$  contains configurations of a disk  $M$  with a dashed circle  $N$  and a boundary point. An arrow with a double bar indicates the isomorphism.