

# **(0, 4) dualities**

Jaewon SONG<sup>1</sup>

*<sup>1</sup>University of California, San Diego, United States*

We study a class of two-dimensional  $\mathcal{N} = (0,4)$  quiver gauge theories that flow to superconformal field theories. We find dualities for the superconformal field theories similar to the 4d  $\mathcal{N} = 2$  theories of class S, labelled by a Riemann surface  $C$ . The dual descriptions arise from various pair-of-pants decompositions, that involve an analog of the  $T_N$  theory. Especially, we find the superconformal indices of such theories can be written in terms of a topological field theory on  $C$ . We interpret this class of SCFTs as the ones coming from compactifying 6d  $\mathcal{N} = (2, 0)$  theory on  $\mathbb{CP}^1 \times C$ . Moreover, some new dualities of  $(0, 2)$  and  $(2, 2)$  theories are also discussed.