

① the "framed 2-Sphere" C^{FS2}

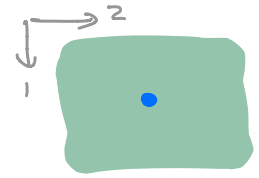
0-generators C_0^{FS2}



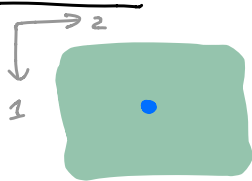
1-generators C_1^{FS2}



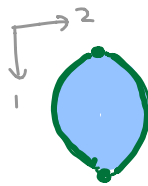
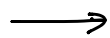
2-generators C_2^{FS2}



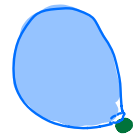
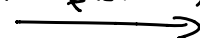
realization:



dualize



attach
(via quotient)



$\cong S^2$

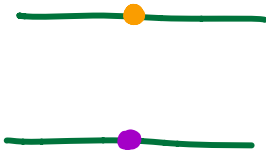
(cell diagram)

② the framed torus C^{FT2}

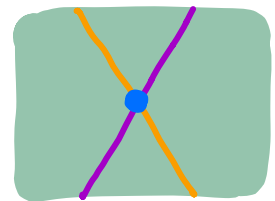
0-generators C_0^{FT2}



1-generators C_1^{FT2}



2-generators C_2^{FT2}



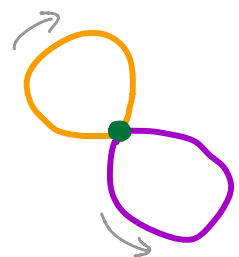
realization

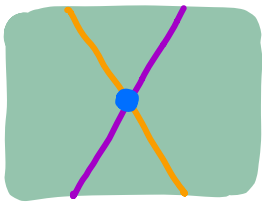


dualize

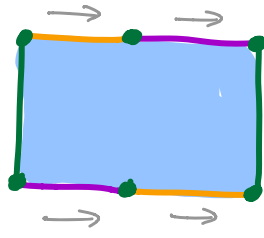


attach

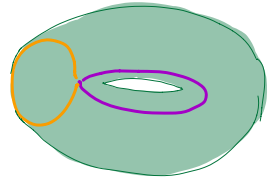




dualize
→



attach
→



$\cong T^2$