

# Higgs bundles and abelianization

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- $H^{\mathbb{C}} \curvearrowright \mathfrak{m}^{\mathbb{C}} \rightsquigarrow$  isotropy representation.

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*For  $(G^{\mathbb{C}})_{\mathbb{R}}$ , we recover the usual theory for complex Lie groups.*



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# Abelianization I: complex matrix groups and spectral covers

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### Corollary (Connected components of the moduli space)

There are  $2(p-1)(g-1) + 1$  connected components in the moduli space  $\mathcal{M}(SU(p+1, p))^{reg}$ .

THANKS!