

MIRROR SYMMETRY FOR CARTAN BRANES

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Let G be a complex reductive Lie group, and consider $\mathbf{Higgs}(G)$ the moduli space of G -Higgs bundles. The choice of a maximal torus $T < G$ defines a BBB brane $\mathbf{Higgs}(T) \subset \mathbf{Higgs}(G)$ (the Cartan brane). According to Kapustin–Witten, this corresponds under mirror symmetry to a BAA brane in $\mathbf{Higgs}({}^L G)$, where ${}^L G$ denotes the Langlands dual group. In this talk I will explain what this BAA should be for rank two Higgs bundles. This is joint work with Emilio Franco.