

ASSUME \mathcal{C} ABELIAN MONOIDAL
 $\mathbb{k} \otimes -, - \otimes \mathbb{k}$ ARE RIGHT EXACT $\forall X \in \mathcal{C}$

GENERALIZED MORITA'S THEOREM
 TAKE $A, B \in \text{Alg}(\mathcal{C})$. THEN:
 $A\text{-Mod}(\mathcal{C}) \simeq B\text{-Mod}(\mathcal{C})$
 AS RIGHT \mathcal{C} -MODULE CATEGORIES
 \Updownarrow
 \exists BIMODULES ${}_A P_B \mathbb{k} B Q_A \Rightarrow$
 $P \otimes_B Q \cong A_{\text{reg}}$ AS A -BIMODULES IN \mathcal{C}
 $\mathbb{k} Q \otimes_A P \cong B_{\text{reg}}$ AS B -BIMODULES IN \mathcal{C} .

GENERALIZED EW THEOREM
 TAKE $A, B \in \text{Alg}(\mathcal{C})$.
 THEN, WE GET AN EQUIV. OF CATS:
 $\text{Rex}_{\text{Mod-}\mathcal{C}}(A\text{-Mod}(\mathcal{C}), B\text{-Mod}(\mathcal{C}))$
 $\uparrow \cong (B, A)\text{-Bimod}(\mathcal{C})$.
 RIGHT EXACT
 MOD. CAT. FUNCTORS