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Suppose that  $E_i$  is a  $C^*$ -correspondence over the  $C^*$ -algebra  $A_i$ ,  $i = 1, 2$ . A (strong) *Morita equivalence* between  $(A_1, E_1)$  and  $(A_2, E_2)$  is an invertible  $C^*$ -correspondence  $X$  from  $A_1$  to  $A_2$  such that  $E_1 \otimes_{A_1} X \simeq X \otimes_{A_2} E_2$ . In *Proc. London Math. Soc.* **81** (2000), 113–168, we showed that a Morita equivalence between  $(A_1, E_1)$  and  $(A_2, E_2)$  induces a strong Morita equivalence between the corresponding tensor algebras  $\mathcal{T}_+(E_1)$  and  $\mathcal{T}_+(E_2)$  in the sense of Blecher, Muhly and Paulsen in the *Memoirs of the AMS* **143** (2000), no. 681. In this talk we will make precise the sense in which a strong Morita equivalence between  $(A_1, E_1)$  and  $(A_2, E_2)$  induces an isometry between the space of completely contractive representations of  $\mathcal{T}_+(E_1)$  and the completely contractive representations of  $\mathcal{T}_+(E_2)$  and discuss other features of the representation theory of tensor algebras that are preserved under this notion of Morita equivalence. (Received September 09, 2009)