

Yoneda Theory for Double Categories

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Abstract. Representables for double categories are defined to be lax functors into a certain double category of sets. We show that horizontal transformations from representables into lax functors correspond to elements of that lax morphism. Vertical arrows give rise to modules between representables. We establish that the Yoneda embedding is a strong morphism of lax double categories which is horizontally full and faithful and dense.