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Distinguished triangles in continuous cluster categories.

Cluster categories are triangulated categories which categorify cluster algebras. We give recognition principles for distinguished triangles in the continuous cluster category using continuous deformations of triangles and show that these also give recognition principles for distinguished triangles in the standard cluster categories of type A_n and A_∞. I will begin with a brief review of the continuous Frobenius category and end with explicit formulas for which mapping make $A \to B \to C \to A[1]$ into a distinguished triangle. This is joint work with Gordana Todorov from Northeastern University.