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**Yu Pan\*** (yp37@math.duke.edu). *The augmentation category map induced by exact Lagrangian cobordisms.*

To a Legendrian knot, one can associate an  $A_\infty$  category, the augmentation category. An exact Lagrangian cobordism between two Legendrian knots gives a functor of the augmentation categories of the two knots. We study the functor and establish a long exact sequence relating the corresponding cohomology of morphisms of the two ends. As applications, we prove that the functor between augmentation categories is injective on the level of equivalence classes of objects and find new obstructions to the existence of exact Lagrangian cobordisms in terms of linearized contact homology and ruling polynomials. (Received August 11, 2016)