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**John A Baldwin\*** (john.baldwin@bc.edu), **Matt Hedden** and **Andrew Lobb**. *On the functoriality of Khovanov-Floer theories*. Preliminary report.

There has been a lot of interest in recent years in connections between Khovanov homology and Floer theory. These connections usually come in the form of spectral sequences, with  $E_2$  page the Khovanov homology of a link and converging to the relevant Floer theory. Important examples include Ozsvath-Szabo's spectral sequence in Heegaard Floer homology and Kronheimer-Mrowka's spectral sequence in singular instanton Floer homology. In particular, the latter was used to prove that Khovanov homology detects the unknot. A natural question is whether these constructions are functorial? That is, are the intermediate pages of these spectral sequences link invariants, and do link cobordisms induce well-defined maps on these pages? We answer these questions in the affirmative, as part of a much more general framework. At the end, we will describe how this framework might be used to define a host of new knot and cobordism invariants. This is joint work with Matt Hedden and Andrew Lobb. (Received September 11, 2014)