1107-18-195 **Ben Webster*** (bwebster@virginia.edu), Department of Mathematics, University of Virginia, Charlottesville, VA 22904. *Uniqueness (or lack thereof) for categorical modules.* Preliminary report.

Whenever one tries to explain categorification to a mathematician unfamiliar with it, there's one question that essentially unavoidable: "Is there a unique way of categorifying X, Y or Z? If there isn't how do you know you have the right one?"

This is a fair (if somewhat annoying) question. At this point we know many objects that don't have a unique categorification, but they do have ones which are in some sense "best." The examples we know seem to suggest a representation will have a "best class" of categorifications if it is the restriction of an irreducible representation under a good inclusion of subalgebras. While this is still preliminary work, I'll try to give some theoretical justification for this assertion. (Received January 14, 2015)