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**David A Clark\*** ([davidclark@rmc.edu](mailto:davidclark@rmc.edu)), Randolph-Macon College, P.O. Box 5005, Ashland, VA 23005. *Functoriality for the  $\mathfrak{su}_3$  Khovanov homology*. Preliminary report.

We prove that Morrison and Nieh's categorification of the  $\mathfrak{su}_3$  quantum knot invariant is functorial with respect to tangle cobordisms. This is in contrast to the categorified  $\mathfrak{su}_2$  theory, which was not functorial as originally defined. We use methods of Bar-Natan to construct explicit chain maps for each variation of the third Reidemeister move. Then, to show functoriality, we modify arguments used by Clark, Morrison, and Walker to show that induced chain maps are invariant under Carter and Saito's movie moves. (Received September 08, 2008)