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Carmen L. Caprau* (ccaprau@math.uiowa.edu), 14 MacLean Hall, Department of Mathematics, The University of Iowa, Iowa City, IA 52242. *An $sl(2)$ tangle homology and seamed cobordisms.*

We construct a Bar-Natan's like tangle homology theory with polynomial coefficients, which is functorial under tangle cobordisms. This theory contains, as a particular case, the Khovanov Homology theory and Lee's variant of it. Therefore, our work naturally resolves the sign ambiguity in functoriality of the Khovanov Homology theory. (Received December 26, 2006)