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Yin Tian* (ytian@scgp.stonybrook.edu), Simons Center for Geometry and Physics,
Stonybrook, NY 11794. *A diagrammatic categorification of quantum $sl(1,1)$ via contact topology.*

The Alexander polynomial of knots can be recovered as Witten-Reshetikhin-Turaev invariant associated to quantum $sl(1,1)$. Knot Floer homology categorifies the Alexander polynomial. In this talk, we present a diagrammatic categorification of quantum $sl(1,1)$. Our construction is motivated from *contact categories* introduced by Ko Honda, which study 3-dimensional contact structures on thickened surfaces. (Received January 15, 2015)