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**Uwe Kaiser\*** ([kaiser@math.boisestate.edu](mailto:kaiser@math.boisestate.edu)), Department of Mathematics, Boise State University, Boise, ID 83725-1555. *Curves on surfaces and Kauffman bracket state sums*. Preliminary report.

Given two simple closed curves on a surface we consider projections realizing their geometric intersection number. We discuss how partial Kauffman bracket state sums calculated from those projections give rise to invariants of the pair of isotopy classes of curves. We discuss the related calculus of tangles in the annulus, and the general problem of relating the geometry of curves on surfaces with Kauffman bracket state sums. (Received July 31, 2010)