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David Shea Vela-Vick* (dvick@math.upenn.edu), Department of Mathematics, 209 South 33rd Street, Philadelphia, PA 19104. *Transverse Invariants and Bindings of Open Books.*

Let $B \subset (Y, \xi)$ be a transverse knot which is the binding of some open book, (B, π) , for the ambient contact manifold (Y, ξ) . In this talk, we show that the transverse invariant $\mathcal{T}(B) \in \widehat{\text{HFK}}(-Y, K)$, defined by Lisca, Ozsváth, Stipsicz and Szabó (LOSS), is nonvanishing for such transverse knots. We will also discuss a vanishing theorem for the invariants defined by LOSS. As a corollary, we will see that if (B, π) is an open book with connected binding, then the complement of B has no Giroux torsion. (Received February 09, 2009)