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

Let  $T \subset (Y, \xi)$  be a transverse knot which is the binding of some open book,  $(T, \pi)$ , for the ambient contact manifold  $(Y, \xi)$ . In this talk, we show that the transverse invariant  $\widehat{T}(T) \in \widehat{HFK}(-Y, K)$ , 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  $(T, \pi)$  is an open book with connected binding, then the complement of  $T$  has no Giroux torsion. (Received August 11, 2008)