

# ESSENTIAL TORI IN ALGEBRAIC TANGLE SPACES

KATIE REIF  
UNIVERSITY OF IOWA

Given an algebraic tangle,  $(B, T)$ , the complement is  $E(T) = B - \text{Int}(N(T))$ , also called the tangle space. It can be shown that this space is irreducible, and I will describe all essential tori in the tangle space for any given algebraic tangle. This result is useful in studying arborescent links and can be used to find whether a given arborescent link admits hyperbolic structure.