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*The ADE Conjecture for links*

A fibered link  $L$  induces a contact structure on  $S^3$ , which is tight if and only if  $L$  is strongly quasipositive. Examples of such FSQP links are plumbings of positive Hopf links. We consider the question of when the  $n$ -fold cyclic branched cover  $\Sigma_n(L)$  of an FSQP link  $L$  is an L-space. (Assuming the L-space Conjecture, for  $L$  prime this is equivalent to  $\pi_1(\Sigma_n(L))$  not being left-orderable, and to  $\Sigma_n(L)$  not supporting a co-orientable taut foliation.) The ADE Conjecture is that for  $L$  prime and FSQP,  $\Sigma_n(L)$  is an L-space for some  $n \geq 2$  if and only if  $L$  is a plumbing of positive Hopf links according to the tree corresponding to one of the ADE Dynkin diagrams.

The problem falls naturally into three cases, where the exterior of  $L$  is Seifert fibered, hyperbolic, or toroidal. In this talk we will discuss some background to the ADE Conjecture and the fact that it is true in the Seifert fibered case.

This is joint work with Steve Boyer and Ying Hu.