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*The number of surfaces of fixed genus in an alternating link complement.*

Let  $L$  be a prime alternating link with  $n$  crossings. We show that for each fixed  $g$ , the number of genus- $g$  incompressible surfaces in the complement of  $L$  is bounded by a polynomial in  $n$ . Previous bounds were exponential in  $n$ . (Received August 28, 2015)