Scharlemann, Martin

Tunnel number one knots satisfy the Poenaru conjecture. (English) Zbl 0592.57004
Topology Appl. 18, 235-258 (1984).

Let K be a PL knot with tunnel number one. The author in a clear and concise manner demonstrates that K satisfies the Poenaru conjecture. Also, the author shows that K cannot be written as the join of two prime tangles (i.e., K is doubly prime). In addition, the arguments provide a geometric proof of Norwood's theorem that tunnel number one knots are prime [see *F. H. Norwood*, Proc. Am. Math. Soc. 86, 143-147 (1982; Zbl 0506.57004)].

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