

Scharlemann, Martin; Thompson, Abigail**Finding disjoint Seifert surfaces.** (English) Zbl 0654.57005

Bull. Lond. Math. Soc. 20, No. 1, 61-64 (1988).

The authors prove that given two orientable surfaces S, T of minimal genus, spanning a tubular neighborhood of a knot K , there is a sequence of surfaces $S = S_0, S_1, S_2, \dots, S_{n-1}, S_n = T$, such that S_i and S_{i-1} are disjoint, and the S_i are spanning surfaces of minimal genus for K . It was not previously known that the intervening surfaces could be all of minimal genus.

They also show there is a sequence of spanning surfaces starting with an arbitrary orientable surface, ending with a surface of minimal genus, and with each successive surface of lesser genus than and disjoint from the preceding.

Reviewer: [L.Neuwirth](#)**MSC:**

57M25 Knots and links in the 3-sphere (MSC2010)

Cited in 14 Documents**Keywords:**[two orientable surfaces of minimal genus](#); [Seifert surfaces of knots](#); [knot](#); [spanning surfaces](#)**Full Text:** [DOI](#)