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David Gabai* (gabai@princeton.edu), Department of Mathematics, Princeton University, Princeton, NJ 08540-5410. *Do norm minimizing surfaces remain norm minimizing after filling?* Preliminary report.

Suppose that S is a Thurston norm minimizing surface in $S^3 \setminus \text{int}(N(L))$, where L is an n -component link. Consider the manifold N obtained by filling several components of $\partial N(L)$ along slopes determined by S . Let T denote the natural extension of S to N . Is T norm minimizing if S is norm minimizing? We present positive and negative results and an interesting conjecture. (Received March 23, 2010)