

Errata to “Topological Algorithms for Graphs on Surfaces”

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- p. 69: The statement of Theorem 8.2 is weaker than Alexander’s original theorem, and not sufficient for our purposes. One should add the following after the paragraph that defines an ambient isotopy:

An *ambient isotopy* of a surface *relatively to its boundary* is a homeomorphism $h_1 : \Sigma \rightarrow \Sigma$ such that there exists a continuous family of self-homeomorphisms $(h_t)_{t \in [0,1]} : \Sigma \rightarrow \Sigma$ where h_0 is the identity, and, furthermore, $h_t|_{\partial\Sigma}$ is the identity for each $t \in [0, 1]$.

The last sentence of Theorem 8.2 should now be:

h is an ambient isotopy relatively to ∂D .

- p. 96: The claim that the unknotting problem is in P modulo the Generalized Riemann Hypothesis is wrong. Replace the last sentence of the paragraph titled “Surfaces embedded in \mathbb{R}^3 ” with:

The unknotting problem is known to be in NP [132], and it has been open for a long time whether it lies in P. It has been proved very recently that it belongs to co-NP if the Generalized Riemann Hypothesis holds [166].