
ERRATA

Erratum to: Elementary Theory of the Alexander–Conway Polynomial

A. B. Sossinsky^{1*}

¹ *Independent University of Moscow, Moscow, 119002 Russia*

Received May 7, 2021; in final form, May 7, 2021; accepted May 11, 2021

DOI: 10.1134/S0001434621050357

The original article can be found online at <https://doi.org/10.1134/S0001434620110188>

In my paper “Elementary Theory of the Alexander–Conway Polynomial” in “Mathematical Notes” (Vol. 108, Nos. 5–6), there is a gap in the proof of Theorem 1. Namely, it is claimed in the proof that “... there is a crossing in the diagram at which the crossing change produces a link diagram with unknotting number $n - 1$.” But this is not necessarily so, because it may happen that the link in the situation under consideration is trivial.

The gap can be filled by considering the case when the link L is trivial additionally. Using Alexander’s original definition of his polynomial and the fact that it reduces to the polynomial $\nabla(L)$ via the change $x \leftrightarrow \sqrt{t} - 1/\sqrt{t}$, it is easy to show that $\nabla(L) = 1$ if L has one component (i.e., L is a knot) or $\nabla(L) = 0$ if it has two or more, and this completes the proof.

It should be noted that the corrected proof cannot be regarded as elementary, so that the statement in the introduction that the paper presents an elementary theory is erroneous.

*E-mail: asossinsky@yandex.ru