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Ivan Dynnikov* (steklov@mi-ras.ru), 8 Gubkina street, Steklov Mathematical Institute of RAS, Moscow, 119991, Russia. *On the equivalence of Legendrian knots.*

It is claimed in the manuscript [arXiv:0909.4326](https://arxiv.org/abs/0909.4326) that two Legendrian knots that cobound an annulus in a tight contact 3-manifold such that the knots have zero relative Thurston–Bennequin invariant and relative rotation number, are equivalent. However, the proof in this manuscript is far from being complete. It is conjectured in [Dynnikov, I. A.; Prasolov, M. V. Rectangular diagrams of surfaces: representability. *Sb. Math.* 208 (2017), no. 5-6, 791–841] that the claim is false, and a potential counterexample is proposed. Namely, an annulus is constructed such that the two components of the boundary are Legendrian knots having zero relative invariants, with no obvious Legendrian isotopy from one component to another. Jointly with V.Shastin we now show that these Legendrian knots are indeed inequivalent. The proof is based on the technique of the manuscript [arXiv:1712.06366](https://arxiv.org/abs/1712.06366). The main technical difficulty is to show in a verifiable way that the symmetry group of the knots is trivial. This is done by analyzing the Alexander polynomial of the knots. (Received September 24, 2018)