

Rectangular Diagrams of Legendrian Graphs

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We consider Legendrian graphs in (\mathbb{R}^3, ξ_{st}) modulo Legendrian isotopy and edge contraction. To a Legendrian graph we naturally associate a (generalized) rectangular diagram — a purely combinatorial object. Moves of rectangular diagrams are introduced so that equivalence classes of Legendrian graphs and rectangular diagrams coincide. Using this result we prove that the natural correspondence introduced by Baader and Ishikawa in [1] between classes of Legendrian graphs and fence diagrams modulo fence moves introduced by Rudolph in [3] and [4] is a bijection.

References

- [1] S.Baader, M.Ishikawa. Legendrian graphs and quasipositive diagrams, *Annales de la faculté des sciences de Toulouse Mathématiques*, V. **18** (2009), no. 2, p. 285-305
- [2] M.Prasolov. Rectangular diagrams of Legendrian graphs, *preprint*.
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- [4] L.Rudolph. Quasipositive plumbing (Constructions of quasipositive knots and links, V), *Proc. A.M.S.*, V. **126** (1998), p. 257-267

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