

**REPORT ON THE MASTER THESIS “LEGENDRIAN  
SUBMANIFOLDS IN HIGH-DIMENSIONAL CONTACT  
TOPOLOGY” BY FILIP STRAKOŠ**

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**Overview.** In his thesis Filip Strakoš studies invariants and properties of Legendrian submanifolds in high dimensional contact topology. In particular, Filip Strakoš studies the classical invariants of Legendrian submanifolds such as the rotation class and Thurston-Bennequin invariant, modern invariants such as the Legendrian contact homology differential graded algebra and its bilinearization, some interesting constructions of Legendrian submanifolds such as the Legendrian product construction introduced by Lambert-Cole and the ambient surgery construction introduced by Dimitroglou Rizell.

The original contributions of Filip Strakoš are of two types:

- The first result concerns the existence of particular family of loose Legendrian embeddings of  $T^3$  into  $(\mathbb{R}^7, \xi_{st})$  that can not be decomposed into the Legendrian product of Legendrian tori of lower dimensions.
- The second result of Filip Strakos is an extension of the DGA-homotopy criterion for augmentations of Chekanov-Eliashberg algebras of Bourgeois and Galant to disconnected Legendrian submanifolds.

**Conclusion.** Save for a few typos and inessential mistakes, the presentation of the material in the thesis appears to be correct and the thesis is reasonably well written.

**Filip Strakoš wrote an excellent Master thesis. The original results in the thesis are new, interesting and could be published in a peer-reviewed journal. I recommend the Master thesis of Filip Strakoš to be considered for the defense with the highest possible grade.**

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