FACULTY
OF MATHEMATICS
AND PHYSICS
Charles University

Report on part of state final examination
Defence of master's thesis

Academic year: 2023/2024

Student's name and surname:	Bc. Vojtěch Štěpančík
Student's ID:	18517250
Type of the study programme:	Master's (post-Bachelor)
Study programme:	Mathematical Structures
Study ID:	737400
Title of the thesis:	Formalization of homotopy pushouts in homotopy type theory
Thesis department:	Department of Algebra (301. • 32-KA)
Language of the thesis:	English
Language of defence:	English
Advisor:	Egbert Rijke, Ph.D.
Reviewer(s):	Andrew Swan, Ph.D.
Date of defence:	11.09.2024 **Venue of defence:** Praha
Attempt:	regular

Course of the examination: The student introduces his work and the obtained results. The supervisor highlighted the importance of Wärn's result whose proof the thesis (partially) formalizes, and put the work of the student into context. He also pointed up that the student discovered and unnoticed gap in Wärn's during this formalization which needs to be patched, which he made explicit. In summary, he said the work was very relevant and useful to the HTT community. The reviewer confirmed the importance and relevance of the topic and praised the presentation of the thesis and its contribution. The following discussion was about the choice of software used for formalization of proofs in HTT, and about the contribution of the thesis.

Result of defence: excellent (1)

Chair of the board: Šťovíček Jan, doc. RNDr., Ph.D. ....

Committee members: Barto Libor, doc. Mgr., Ph.D. ....

Golovko Roman, Ph.D. ....

Jurčo Branislav, prof. Ing., CSc., DSc. ....

Patáková Zuzana, RNDr., Ph.D. ....

Příhoda Pavel, doc. Mgr., Ph.D. ....

Růžička Pavel, doc. Mgr., Ph.D.   ....

Somberg Petr, doc. RNDr., Ph.D.   ....

Stanovský David, doc. RNDr., Ph.D.   ....

Šaroch Jan, doc. Mgr., Ph.D.   ....

Trlifaj Jan, prof. RNDr., CSc., DSc.   ....