FACULTY
OF MATHEMATICS
AND PHYSICS
Charles University

Report on doctoral thesis defence jointly organized by Charles University and Julius-Maximilians-Universität Würzburg

Academic year: 2023/2024

Student's name and surname:	Jan Andreas Scherz, M.Sc., Ph.D.
Student's ID:	16415992
Type of the study programme:	doctoral
Study programme:	Mathematical analysis
Study ID:	628569
Title of the thesis:	Weak Solutions to Mathematical Models of the Interaction between Fluids, Solids and Electromagnetic Fields
Thesis department:	Department of Mathematical Analysis (303. • 32-KMA)
Language of the thesis:	English
Language of defence:	English
Supervisor:	Mgr. Barbora Benešová, Ph.D.
Reviewer(s):	prof. Boris Muha
	prof. Karoline Disser
Date of defence:	23.01.2024 **Venue of defence:** Praha
Attempt:	regular

Course of defence: The defence was held at the University of Würzburg in agreement with the cotutelle-agreement. The defence started by a presentation of 30 minutes of the student Jan Scherz. He presented in a very clear manner the main results of the thesis: namely, the existence of weak solutions for a fluid-structure problem of a rigid body moving in electromagnetically conducting fluid and the existence of solutions for a model in magnetoelasticity.

After the talk a discussion of about 30 minutes followed, where several questions were asked. In particular, questions were asked about the regularity of the domain, the constraints and intertia in the model, extension to vacuum or boundary conditions. The student Jan Scherz answered all questions in a satisfactory manner.

In the non-public part of the defence it was voted unanimously that Jan Scherz passed the defence.

Result of defence:	pass (P)	
Chair of the board:	prof. Dr. Frank Werner	....
Committee members:	Mgr. Barbora Benešová, Ph.D.	....
	prof. RNDr. Martin Kružík, Ph.D., DSc.	....
	prof. Dr. Anja Schlömerkemper	....
	Prof. Dr. Daniel Wachsmuth	....
	RNDr. Šárka Nečasová, DSc.	....

212531 - Jan Andreas Scherz, M.Sc., Ph.D.