

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>Methods for Interferometer Adjustment</b>
<b>Author's name:</b>	<b>Harissh Lakshminarayanan</b>
<b>Type of thesis :</b>	bachelor
<b>Faculty/Institute:</b>	Faculty of Mechanical Engineering (FME)
<b>Department:</b>	The Department of Instrumentation and Control Engineering
<b>Thesis reviewer:</b>	Ing. Jiří Čáp, Ph.D.
<b>Reviewer's department:</b>	CTU in Pragut, Faculty of Mechanical Engineering, The Department of Instrumentation and Control Engineering

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b> <i>How demanding was the assigned project?</i>	<b>ordinarily challenging</b>
The assignment is not fundamentally demanding in the theoretical part, also contains the programming and the experimental part .It is suitable for the bachelor's thesis.	

<b>Fulfilment of assignment</b> <i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	<b>fulfilled with minor objections</b>
The graduate basically fulfilled all the points of the assignment. I consider the lack of completion of the experimental part, where the real adjustment of the interferometer could not be seen, to be a disadvantage.	

<b>Methodology</b> <i>Comment on the correctness of the approach and/or the solution methods.</i>	<b>correct</b>
Basically the student proceeded logically, presented an overview of the types of interferometers, and actuators for mirror movement.	

<b>Technical level</b> <i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	<b>C - good.</b>
The thesis contains a reasonable theoretical introduction to the basics of interferometry. In the section devoted to drives, perhaps too much attention is paid to physical foundations at the expense of technical and application parameters. Especially in the chapter on electromagnetic actuators, other technical implementations than linear motors could have been mentioned.	

<b>Formal and language level, scope of thesis</b> <i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	<b>B - very good.</b>
The language level is good, the work is clear.	

<b>Selection of sources, citation correctness</b> <i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	<b>B - very good.</b>
The work is properly provided with a list of used and cited literature to which it is referred in the text.	

<b>Additional commentary and evaluation (optional)</b> <i>Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.</i>
---

Please insert your comments here.

### III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

*Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defense of the student's work.*

The work fulfilled the assignment of the design of the interferometer adjustment and the laboratory realization of part of the device. Unfortunately, there was no full testing with regard to reaching the interference field.

Questions:

1. Can you provide an optical schema of the proposed assembly from Chapter 11?
2. Can you clarify the calculations from Chapter 10? Can you demonstrate this on an optical schema? You claim that  $l$  is the lens distance. From what?
3. Are you sure the distance marked in Figure 10 is in micrometers?
4. Do you have any pictures of real interference fringes from your experiment?

The grade that I award for the thesis is **C - good**.

Date: **5.2.2023**

Signature: