



Master thesis opponent's review

Master thesis: Simulation of an electric vehicle including different power train components
Author: Vyas Singh Chauhan
Thesis supervisor: Ing. Jan Bauer, Ph.D.
Thesis opponent: Doc. Dr. Ing. Jan Kyncl

Rating (1 – 5)
(1 = best; 5 = worst):

1. Fulfillment of assignment requirements:	<input type="text" value="1"/>
2. Systematic solutions of individual tasks:	<input type="text" value="2"/>
3. Ability to apply knowledge and to use literature:	<input type="text" value="1"/>
4. Thesis formal and language level:	<input type="text" value="2"/>
5. Thesis readability and structuring:	<input type="text" value="1"/>
6. Thesis professional level:	<input type="text" value="2"/>
7. Conclusions and their formulation:	<input type="text" value="2"/>
8. Final mark evaluation (A, B, C, D, E, F):	<input type="text" value="C"/>
verbal:	Good

Brief summary evaluation of the thesis (compulsory):

The author fulfilled the assignment of the diploma thesis. Unfortunately, the search and descriptive part of the diploma thesis is more carefully and detailed than the description of the created models. The author uses different symbols for multiplication in different places (eqns. 1.1, 1.4, 4.10, 4.11) and does not distinguish scalar and vector variables.

From the text part, it is not possible to see how the recuperation is modeled, especially regarding the limitation of the charging current during braking.

Questions:

1. Explain the formula 1.2 (page 16).
2. How many decimal places in the results can be trusted (for example $I=20.948A$)?
3. How is recuperation modeled, especially when it comes to limiting the charging current when braking?

Date: 28. 8. 2017

Signature: