

**Master student:** Bc. Tereza Puchrová

**Department:** KKY

**Thesis name:** Modelling and experimental validation of signalling pathways with relevance to homologous mammalian systems

	Subject of the evaluation	Above average	Average	Below average
1	Linguistic form and final polishing of the text	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Form and content of the thesis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Suitability of the used methods	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Processing and evaluation methods	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Correctness of the results obtained	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Own contribution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Evaluation supplement, remarks, questions:

The candidate has submitted an excellent Master's Thesis manuscript, in which style, language and structure are fully in line with the quality and quantity of the contributions and results obtained.

- Clear structure of the manuscript and the supplementary information.
- Very good, logic, format and background.
- Figures and captions are clear and overall of very good quality.
- English style and grammar is more than acceptable.
- With a spell checker, the candidate will be able to remove all typographical errors throughout the thesis.

Remarks and opponent's appreciations:

The author explains the idea of a mechanism for tuning the receptor activation (a system inside the yeast cell), which is activated by certain pheromones. The proposed mechanism dynamically tune the receptor by changing the feedback strength (expression of a specific protein) to control the system response.

This is fully in agreement with all the posterior content of the thesis and supported by the modelling, simulation and validation of the system model. Actually, more assays are needed in the model validation section, in order to enhance the accuracy of the stochastic model and to adjust the parameters in the model. That eventually it will be possible as a future work that the author explains at the end of the manuscript.

Nevertheless, the writing could be more concise and more direct to the point. Also in the conclusion, a clear message of the outcome and usability of the result will be very useful and also to state how the results are suited to build on them for further research in the topic.

# SOUHLASÍ S ORIGINÁLEM

Fulfillment of the tasks assigned	<input checked="" type="checkbox"/> fully	<input type="checkbox"/> partially	<input type="checkbox"/> none	
I recommend this thesis for a defense	<input checked="" type="checkbox"/> yes		<input type="checkbox"/> no	
Overall thesis grade	<input checked="" type="checkbox"/> excellent	<input type="checkbox"/> very good	<input type="checkbox"/> good	<input type="checkbox"/> fail
Name, surname, opponent's title Yaira Boada Acosta, MSc.				
Opponent's department (university): Control Systems Engineering Department (DISA), Universitat Politècnica de València, SPAIN.				

11-09-2015

Date

  
Signature