

## Evaluation table for opponents, please attach to the written statement

Your name and signature

Name of the thesis defender

Date

Please evaluate the doctoral thesis based on the merits shown in the defence, and the general quality requirements set for theses at Aalto University:

1. **Novelty:** The doctoral thesis contains new scientific knowledge in the field it represents.
2. **Presentation:** The doctoral thesis presents the new results clearly and scientifically and the language of the thesis is fluent.
3. **Contribution:** The independent contribution of the doctoral student is sufficient and clearly demonstrable.
4. **Scientific methods:** The research methods, experimental setups, measurements, and the data presented fulfil the criteria set for scientific research.
5. **Research ethics:** The doctoral thesis conforms to the principles of responsible conduct of research and adheres to ethically sustainable principles

Overall evaluation	Pass	Fail*
Based on the quality of the thesis as well as the merits shown by the thesis defender in the public defence, I suggest pass/fail for the thesis:		

\* Please carefully justify the reasons for failing the doctoral thesis in your statement.

Doctoral thesis award	Yes**	No
In the School of Science about <b>10% of the doctoral theses are awarded annually</b> . Do you consider this thesis to be of exceptionally high quality on international level and nominate it for a doctoral thesis award? **		

\*\* When nominated for the award, the doctoral thesis should be among the top 10% of its field and fulfill the following requirements:

- the thesis has particular scientific merits
- the results are exceptionally significant in the research field
- the student has a significant independent contribution in obtaining the results
- the manner of representation is clear, and the language and reference practice used are first-rate
- the thesis has been defended excellently in the public examination.