

# INVITATION to PhD Defense by Mette Hvass

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**Monday September 12, 2022 • 13.00-16.00**

**Auditorium (1.008), A.C. Meyers Vænge 15, Building A, 2450 Copenhagen SV**

*'Balanced Brightness Levels:  
Exploring human sensory experience of lighting and darkness in urban public contexts'*

## Introduction:

The purpose of this PhD thesis is to investigate the influence of lighting and darkness on human sensory experience of architectural and social qualities in urban public spaces during the dark hours. In addition, how these human experiences can be collected through a transdisciplinary process.

In urban contexts, there is a preconceived notion that lighting is associated with safety, while darkness is associated with fear. This notion needs to be challenged, as overly illuminated spaces tend to create a tense atmosphere and negatively affect co-presence.

This investigation is carried out through four interrelated studies, three pre-analyses (a literature study, a field- and a lab study) leading to a field experiment. Tram stations in Aarhus are used for context-specific case studies to examine the importance of balancing brightness levels between adjacent light zones and in relation to everyday urban activities.

The findings indicate that lower and balanced brightness levels can sharpen our senses, create a relaxed atmosphere, enrich perceptions of - and connection with – the surroundings and increase (perceived) safety. Furthermore, the four studies demonstrate a transdisciplinary way to draw nearer to human experiences of lighting and darkness in every day (nocturnal) public activities.

## Assessment Committee:

**Senior Researcher Anne Kathrine Frandsen (chair)**, Department of the Built Environment, Aalborg University, CPH Campus.

**Senior Lecturer Carlos López Galviz**, Institute for Social Futures, Lancaster University, United Kingdom

**Associate Professor Katja Bülow**, Institute of Architecture and Design, Royal Danish Academy – Architecture, Design, Conservation, Denmark

**Supervisor:** Associate professor Ellen Kathrine Hansen, Department of Architecture, Design and Media Technology, Aalborg University, Copenhagen Campus.

On SEP 12 Associate professor Henrik Schønau-Fog will stand in if Ellen Kathrine Hansen is absent.

The supervisor is a committee member in a non-voting capacity.

*A reception will be arranged afterwards. The PhD Dissertation as a download, can be obtained from Mette Hvass by sending an email to [mh@create.aau.dk](mailto:mh@create.aau.dk)*