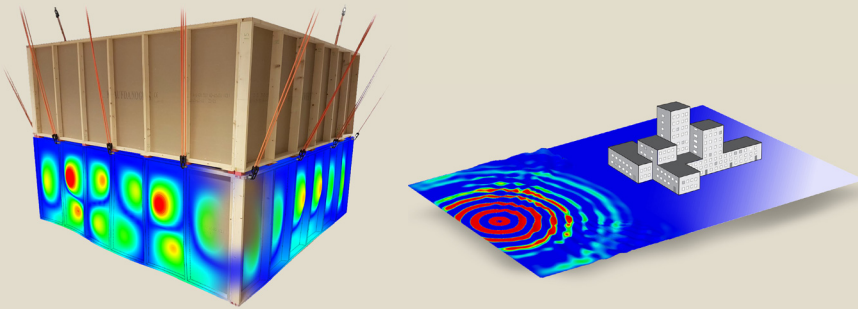


EXAMENSARBETARE SÖKES!

VIBRATIONS IN THE BUILT ENVIRONMENT Applications in timber construction



DESCRIPTION

The work performed by our research group focusing on vibrations in the built environment is driven by the need to understand and predict physical phenomena, and to develop engineering solutions for mitigating vibrations and noise. As part of our research, we develop methods for predicting vibrations and noise in buildings, involving both computational models and experimental results. We consider both external and internal loads, for example, railroad traffic and human activities such as walking.

The general aim of the research is to enable sustainable and densified urban areas. To fulfill this aim, it is crucial to analyze disturbing vibrations and noise due to the negative effect on people's health. During the last years, special attention has been given to multistory timber buildings because of their increased use in construction industry and their high susceptibility to noise and vibrations compared to concrete buildings.

We are now seeking students that have an interest in structural dynamics as well as in timber buildings. Required prerequisites are the two courses in the Finite Element Method, and Structural Dynamic Computing.

OUR DIVISION

We at the Division of Structural Mechanics are driven by understanding engineering problems and conducting research that contributes to solving societal challenges. We offer a good study and work environment, good team spirit with dedicated employees and joint "fika" every day. We have a strong focus on high-quality teaching and research. We are proud to belong to a university that is ranked among the top 100 in the world and we enjoy the international environment in which we operate.

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