Building design is changing. Today we are no longer only talking about structural design: concepts such as sustainability, energy efficiency, room lighting, space comfort have become paramount... This integrated design is inherently multiphysical and multiscale, and therefore requires tools able to satisfy these requirements.

During the workshop we will see how COMSOL Multiphysics® allows to consider all phenomena involved in the development of a building project, coupling different physics in the same interface: structural analysis, thermofluidodynamic simulations (analysis of thermal bridges, heat exchange by conduction, radiation and convection, moisture transport and flow field simulations for energy efficiency applications), propagation of light and sound.