

Abstract

The seminar titled <Interaction between solar radiation and built environment: studies and experiences from the building physics research group of the University of Pisa> will be held by prof. Giacomo Salvadori. The seminar will be structured in four parts, each lasting approximately 1 hour.

The seminar will begin (part I) by providing introductory concepts regarding solar radiation, its spectral characteristics, forecasting methods and techniques for measuring solar radiation on the ground. Parts will follow, in which some research activities carried out by the building physics group of the University of Pisa will be described, with particular reference to: impact of infrared solar radiation (part II) on design strategies for resilient buildings and urban districts; impact of visible solar radiation (part III) on visual comfort and on artificial light use reduction; impact of ultraviolet solar radiation (part IV) on people's health and usability of external urban spaces.

The seminar will alternate more theoretical contents with more applied ones, trying to interest and be useful to a significant number of students, considering the interdisciplinarity characteristic of the DESTeC doctoral course.