Abstract

Advanced acoustic models for built environments

Approximate acoustic models, such as geometrical acoustics (GA) techniques, are easy to learn and fast, and therefore they yield useful results once the assumptions behind the GA methods are met. However, they do fail to model important acoustic phenomena in built environments in certain cases. In this talk, we will discuss some cases that the GA methods cannot simulate satisfactorily and what alternatives we have, i.e., advanced acoustic models and boundary conditions that ensure more physically correct and perceptually authentic results.

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