

Heat, Light and Wind simulation on an urban scale

Tuesday 7th of February 2017, Parc Montauray, Anglet

Organization: Benoit Beckers

10h00 – 11h40

Radiation in Complex Geometries

Benoit Beckers

“Shortwave and longwave balances on an urban scale”

Gonzalo Besuievsky

“Optimizing Window Shape for Daylighting Considering Urban Environments”

Raphaël Nahon

“Evaluation of the daylight conditions at early stages of an urban project”

José Aguerre

“Importance-Driven radiosity for computing urban radiation”

Eduardo Fernandez

“Photon mapping and other Monte Carlo based techniques to solve inverse lighting problems”

14h00 – 15h20

Multiphysic Mockup

Christian Laborderie

“Cast3M, a multiphysic Finite Element Program opened to the research community”

Catherine Vayssade

“From finite elements to simplified models for street shape optimization”

David Muñoz

“Adaptive Urban Modeling for Solar Energy Simulations”

Gustavo Patow

“Interactive Low-Cost Wind Simulation for Cities”

15h40 – 16h20

Applications to urban buildings

Marc Lotteau

“Nature4Cities: development of a holistic assessment methodology for Nature-Based Solutions in urban areas”

Elena Garcia

“City thermal history, from Barcelona to Bayonne”