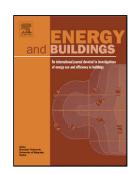
Accepted Manuscript

Title: Simulation-based model predictive control by the multi-objective optimization of building energy performance and thermal comfort

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PII: S0378-7788(15)30393-5

DOI: http://dx.doi.org/doi:10.1016/j.enbuild.2015.11.033

Reference: ENB 6278

To appear in: *ENB*

Received date: 16-3-2015 Revised date: 30-9-2015 Accepted date: 12-11-2015

Please cite this article as: F. Ascione, N. Bianco, C. De Stasio, G.M. Mauro, G.P. Vanoli, Simulation-based model predictive control by the multi-objective optimization of building energy performance and thermal comfort, *Energy and Buildings* (2015), http://dx.doi.org/10.1016/j.enbuild.2015.11.033

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ACCEPTED MANUSCRIPT

A novel simulation-based model predictive control procedure is proposed.

The multi-objective optimization of energy cost and thermal comfort is achieved.

The outcome is the optimal strategy for the daily HVAC system control.

The minimum run period is used in energy simulations to cut the computational time.

High benefits are proved for a multi-zone residential building in Naples (Italy).

Simulation-based model predictive control by the multi-objective optimization of building energy performance and thermal comfort

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