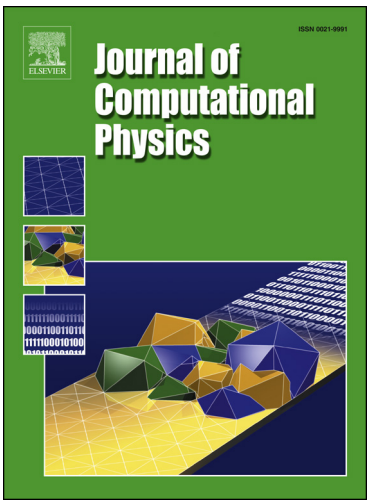
Accepted Manuscript



The PAC-MAN model: Benchmark case for linear acoustics in computational physics

Harald Ziegelwanger, Paul Reiter

PII: S0021-9991(17)30463-1
DOI: http://dx.doi.org/10.1016/j.jcp.2017.06.018
Reference: YJCPH 7417

To appear in: *Journal of Computational Physics*

Received date: 17 March 2017
Revised date: 6 June 2017
Accepted date: 7 June 2017

Please cite this article in press as: H. Ziegelwanger, P. Reiter, The PAC-MAN model: Benchmark case for linear acoustics in computational physics, *J. Comput. Phys.* (2017), http://dx.doi.org/10.1016/j.jcp.2017.06.018

Highlights

- A benchmark case for 2D harmonic linear acoustic problems is proposed.
- The PAC-MAN geometry is used as emitter/scatterer in this benchmark.
- An analytic formulation of radiated and scattered sound is derived.
- Line and disk sources, plane waves, and surface vibrations are considered.