

Brief Biosketch of José-Daniel Muñoz

Dr. José-Daniel Muñoz is Titular Professor in Physics at the National University of Colombia (UNAL), Bogotá, where he started teaching in 1994. He received his B.Sc. (1991) and M.Sc. (1996) in Physics from UNAL and his Ph.D. in Physics from the University of Stuttgart in 2001, under the advice of Prof. Hans J. Herrmann. Since then, he has been director of the Simulation of Physical Systems Group at UNAL. His research interest focuses on the numerical modeling and analysis of granular media, building materials, acoustics, fluid mechanics, vehicular traffic and statistical mechanics by using discrete elements, lattice Boltzmann, cellular automata and Monte Carlo methods, including the developing of novel simulation techniques. In those areas he has been advisor of 4 Ph.D., 24 M.Sc.

and 32 B.Sc. students in Physics and Engineering. Some of his works have been reviewed in *Nature*, *Scientific American* and *New Scientist*, and he has established active collaborations with groups in Switzerland, Australia, USA, Spain, France, Hungary and Colombia. Along with his research and academic activities, Prof. Muñoz served as director of the Academic Programs in Physics from 2008 to 2012, director of the Department of Physics from 2018 to 2020 and co-founder of the M.Sc. program on Exact and Natural Sciences Teaching at UNAL, where he has been advisor of 27 students. Since 2014 he is member of the IUPAP C13 commission, *Physics for Development*.

