

Curriculum vitae

Name: František Slanina

Titles: RNDr., CSc.

Work address: Institute of Physics ASCR, Na Slovance 2, CZ-18221 Praha 8, Czech Republic

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Education, employment, and foreign stays:

1986: master degree (RNDr.) in Condensed Matter Physics, from the Charles University, Prague

1990-1991: Foreign stay at University of Rome "Tor Vergata", Italy

1991-1993: doctoral studies at the Institute of Physics, Czech Academy of Sciences

1995: doctoral degree (CSc.) in Condensed Matter Physics, from the Institute of Physics, Czech Academy of Sciences

1995-1997: Center for Theoretical Study, Charles University, Prague, junior researcher

1997-present: Senior researcher at the Institute of Physics, Czech Academy of Sciences

Pedagogical activities:

Special course "Physics of complex systems" at the Faculty of mathematics and physics, Charles University, Prague

Research interests:

Far-from-equilibrium transport; Colloid and granular systems; Localization of classical waves in random medium

Research activities in detail (last 5 years):

I studied transport of colloid particles in flow through narrow pores, applying various approximate analytical techniques, mainly using expansion techniques in small parameters related to the geometry of the problem. I investigated several mechanisms leading to ratchet effect in such systems. I performed computer simulations of dense driven particle systems in narrow pores. I was involved in developing techniques of dimensional reduction of advection-diffusion problems with complex boundary conditions. I studied localization phenomena on random graphs modelling complex geometry of granular and glassy media, as well as many-body localization.

WOS data: 63 articles, 1032 citations, h-index 17