

Alexey V. Sergeev

Curriculum Vitae

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Personal Information

Date of Birth May 18, 1957
Citizenship Russia. US permanent residency

Education

- 1986 **Ph.D.**, *Petersburg State University*, St. Petersburg, Russia.
The U.S. equivalence of the degree of Candidate of Physical and Mathematical Sciences. Thesis titled "Development of Analytical Methods of Perturbation Theory for Calculation of Atoms and Ions". Advisor A. I. Sherstyuk.
- 1974–1980 **B.Sc. and M.Sc.**, *Petersburg State University*, St. Petersburg, Russia.
The U.S. equivalence of Diploma confirming the qualification of Physicist. Grade Average 3.70. Specialized in theoretical physics and quantum mechanics.

Experience

- 2007–Present **Visiting Scholar**, *Texas A M University*, College Station, TX.
Molecular structure using generalized Bohr model and large- D approach. Group of M. Scully.
- 2005–2006 **Postdoctoral Researcher**, *Tulane University*, New Orleans, LA.
Semiclassical surface hopping methods. Advisor M. Herman. 2 publications.
- Oct.–Dec. 2005 **Visiting Researcher**, *Cornell University*, Ithaca, NY.
 $1/D$ -expansion and planetary states of helium, semiclassical theory. Group of G. Ezra.
- 2003–2004 **Postdoctoral Researcher**, *University of Massachusetts at Dartmouth*, MA.
Møller-Plesset perturbation theory, study of convergence. Advisor D. Goodson. 4 publications.
- 2000–2002 **Postdoctoral Researcher**, *University of the Negev*, Beer-Sheva, Israel.
Radiationless transitions in molecules using the method of Wigner functions. Advisor B. Segev. 5 publications.
- 1998–1999 **Postdoctoral Researcher**, *Purdue University*, West Lafayette, IN.
Transition from bound states to continuum spectrum, stability of atoms with varying nuclear charge, doubly negative ions. Advisor S. Kais. 3 publications
- Sept.–Dec. 1996 **Research Associate**, *University of Oklahoma*, Norman, OK.
 $1/D$ -expansion for helium atom. Group of D. Watson
- 1996–1997 **Research Associate**, *Southern Methodist University*, Dallas, TX.
 $1/D$ -expansion in atomic and molecular physics, methods of summation. Advisor D. Goodson. 5 publications
- 1980–2002 **Researcher**, *S. I. Vavilov State Optical Institute*, St. Petersburg, Russia.
Screened Coulomb potentials, atoms in strong fields, $1/n$ -expansion in quantum mechanics, theory of Padé approximants. Collaboration with group of V. S. Popov from ITEP, Moscow. More than 35 publications, prize of St. Petersburg Physical Society (1993).