



Vitalii Semin

27-29/12/1985

Physics

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Russia

I work in the field of theoretical physics. The main interests are related to the problems of quantum optics and the theory of open systems. I have completed my PhD in Samara (Russia) in quantum optics. I like to set goals and to cope with them. I love to discover new things and continually look for new knowledge.

CURRENT RESEARCH

Topic

Open spin system

Methodology

- Exactly solvable models
- Mathematical methods
- Computer simulation

Application

Open quantum system:
testing of applicability of
approximation methods

Thermodynamics: account
of influence more delicate
effects

UKZN main Publications

1. V. Semin, I. Sinayskiy, F. Petruccione "Initial correlation in a system of a spin coupled to a spin bath through an intermediate spin" (Physical Review A, 86, 062114 (2012))

Past Researches

1. Quantum optics and theoretical laser physics
 - A. V. Gorokhov, V. V. Semin. Calculation of the Fluorescence Spectrum of Two Interacting Atoms in External Field (Optics and Spectroscopy, 2009, Vol. 107, No. 4, pp. 586-591).
 - A. V. Gorokhov, V. V. Semin. Radiation of a System of Two Identical Interacting Two-Level Atoms (Bulletin of the Russian Academy of Sciences: Physics 2009, Vol. 73, No. 4, pp. 520-522)

Future Interests

1. Focus my efforts on the open problems in physics

Extra Interests

Music, Anime, Manga.