

Sergei Agayan

Education:

Faculty of Mechanics and Mathematics of the M. V. Lomonosov Moscow State University (MSU), 1977.

Degrees:

- D.Sc. in physics and mathematics, specialty “Geoinformatics”, Institute of Earthquake Prediction Theory and Mathematical Geophysics, RAS (2005);
- Ph.D. in physics and mathematics, specialty “The Theory of Functions and Functional Analysis”, Faculty of Mechanics and Mathematics of MSU, (1982).

Main scientific results:

Mathematics. Theory of representations of groups

- The proof of non-Archimedean analogue of the Gelfand-Raikov theorem for regular locally compact groups;
- The proof of non-Archimedean analogue of Plancherel theorem for regular locally compact groups;
- The proof of the Gelfand-Graev-Gvishiani formula for the characters of representations of discrete series of the group G of matrixes of the second order with elements from a local non-Archimedean field and the description of representations of a derived group G_x (1973–1974).

Mathematics. The theory of Banach algebras

- Construction of a structural beam for non-Archimedean Banach algebras;
- Study of Banach algebras through seminorms.

Mathematical geophysics and geoinformatics

- Development of new mathematical methods for clustering (2009–2013);
- Algorithmization of recognition of abnormal activity on time series based on fuzzy set theory and their application for volcano monitoring and analysis of geomagnetic data (2001–2006);
- Development of new methods in hierarchical clustering of spatial geological, geophysical and geodynamic objects on the basis of discrete mathematical analysis and their applications in geophysics and geodynamics (1999–2006);
- Recognition of locations of strong earthquakes with the assessment of its reliability in different seismic regions of the world in terms of the model of dynamic problems of recognition (1978–1990; 2010–2013);
- Gravitational smoothing and its application to the series of geophysical data (2005–2015).

Scientific research and management:

Member of the Scientific Council of the Geophysical Center of the Russian Academy of Sciences (GC RAS) (2005)

Lecturing and tuition:

Consultant for one doctoral and four PhD theses.

Publications:

Author of more than 100 papers published in international and Russian scientific journals.