

Dept. of Physics and Astronomy
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Field of Research Physics of multiparticle production. Ultrarelativistic nuclear collision.

Experience

Distinguished Professor Wayne State University (Department of Physics and Astronomy)

2023 to present

- Teaching general and specialized physics courses

Professor

- Member of STAR (RHIC, BNL) and ALICE (LHC, CERN) Collaborations

2004 to 2023

- Principal author of more than 25 STAR and 20 ALICE papers.

Associate Professor

- Discovery of the global polarization in heavy ion collisions

1999 to 2004

- Search for the Chiral Magnetic Effect at RHIC and LHC
- Principal author of the first ALICE paper – measurement of elliptic flow at LHC
- Discovery of large elliptic flow at RHIC, evidence for sQGP (perfect liquid)
- Proposed constituent quark scaling of elliptic flow - evidence for deconfinement
- Principal author of the first STAR (RHIC) paper – measurement of elliptic flow at RHIC
- Proposal and first measurements of correlations in support of local strong parity violation

Special Scientist

Lawrence Berkeley National Laboratory

1998 to 1999

- Event-by-Event physics of nuclear collisions at SPS (NA49) and RHIC (STAR) energies
- Anisotropic flow and two-particle correlation analyses of NA49 (SPS, CERN) data

Visiting Scientist

University of Heidelberg

1996 to 1998

- Study of radial and directed transverse flow in nucleus collisions
- Anisotropic flow analyses of the E877 (AGS, BNL) and the NA45 (SPS, CERN) data

Visiting Scientist

University of Pittsburgh

1992 to 1996

- Development methods for anisotropic flow measurements in nuclear collision
- Discovery of in-plane elliptic flow at AGS BNL.
- Development methods for femtoscopic measurements in presence of anisotropic flow

Exchange Visitor

Theoretical Physics Institute, University of Minnesota

1989 to 1990

- Development of Split-Bin Correlation Function method for study of intermittency

Associate Dean

Faculty of Theoretical and Experimental Physics, Moscow Engineering

1983 to 1992

Physics Institute (~ 300 faculty, 1800 students)

Associate Professor

Moscow Engineering Physics Institute (Department of Theoretical Physics)

1988 to 1996

- Teaching of general courses in theoretical physics

Assistant Professor

- Research on anisotropies and asymmetries in particle production in nuclear collisions

1983 to 1988

- Study of multiparticle production off nuclei and l^+l^- signals of QGP

Junior Scientist

- Development of quark combinatorics techniques

1980 to 1983

- Study of multiparticle production in parton model

Education

Ph.D in Physics

Moscow Engineering Physics Institute, Moscow, Russia. February 1980.

(Candidate of sciences,
Physics & Mathematics)

Intranuclear parton cascades and multiparticle production in hadron-nucleus collisions

Diploma (with honor)

Moscow Engineering Physics Institute, March 1976.

Generalized Vector Dominance Model and lepton-nucleus collisions

Awards

- **Moscow Youth Prize in Science** (1985) for development of *Quark-parton picture of multiparticle production*

- Elected **Fellow of American Physical Society**, 2008, for *numerous seminal contributions to the methods and interpretation of collective flow in relativistic nuclear collisions*

- **Richard J. Barber Faculty Recognition Award**, 2011

- Inducted to **Wayne State Academy of Scholars**, 2012

- Appointed to rank of **Distinguished Professor, Wayne State University**, 2023

Publications

As of Jan-2025 more than 800 publications in leading scientific journals with total of more than 110000 citations, Hirsch index 171 (216) according to InSPIRE (Google Scholar) database.