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Education

Ph.D. 1974 University of Copenhagen, Denmark (Nuclear Physics)
M.Sc. 1970 University of Copenhagen, Denmark (Mathematics-Physics)

Employment

2007-Present Chief, Low Energy Group, Physics Div., Argonne National Laboratory
2003-Present Senior Physicist, Argonne National Laboratory
1982-2003 Physicist, Argonne National Laboratory
1977-1982 Assistant Physicist, Argonne National Laboratory
1977 Visiting Staff Member, Los Alamos National Laboratory
1974-1977 Postdoctoral Appointee, Niels Bohr Institute

Sabbaticals

2002-2003 Detailee for Heavy-Ion Research, Department of Energy, Washington, DC
1992-1993 Stony Brook University, Stony Brook, NY
1983-1984 Niels Bohr Institute, Copenhagen, Denmark

Honors and Awards:

Exceptional Performance Award, Argonne National Laboratory (1993)
Outstanding Referee, American Physical Society journals, 2008
Fellowship, American Physical Society (2002)

Selected Professional Activities:

ATLAS Program Advisory Committee
ALICE Review Panel, DOE

Research Interests and Projects:

Nuclear Fission, Light-Ion Transfer Reactions, Heavy Ion Fusion, Relativistic Heavy-ion Collisions

Recent publications

Single-neutron energies outside ^{136}Xe

B. P. Kay *et al.*
Phys. Rev. C **84**, 024325 (2011)

Search for a 2-quasiparticle high-K isomer in ^{256}Rf

A. P. Robinson *et al.*

Phys. Rev. C **83**, 064311 (2011)

Fusion Reactions with the One-Neutron Halo Nucleus ^{15}C

M. Alcorta *et al.*

Phys. Rev. Lett. **106**, 172701 (2011)

Charged-particle multiplicity and pseudorapidity distributions measured with the PHOBOS detector in Au+Au, Cu+Cu, d+Au, and p+p collisions at ultrarelativistic energies

B. Alver *et al.*

Phys. Rev. C **83**, 024913 (2011)

Commissioning of the HELIOS spectrometer

J.C. Lighthall *et al.*

Nucl. Instr. Meth. **A622**, 97-106 (2010)

$^{15}\text{C}(\text{d},\text{p})^{16}\text{C}$ Reaction and Exotic Behavior in ^{16}C

A. H. Wuosmaa *et al.*

Phys. Rev. Lett. **105**, 132501 (2010)

Fusion hindrance for Al-27 + Sc-45 and other systems with a positive Q value

C. L. Jiang *et al.*

Phys. Rev. C **81**, 024611 (2010)

Event-by-Event Fluctuations of Azimuthal Particle Anisotropy in Au+Au Collisions at $\sqrt{s_{\text{NN}}}=200$ GeV

B. Alver *et al.*

Phys. Rev. Lett. **104**, 142301 (2010)

First Experiment with HELIOS: The Structure of ^{13}B

B.B. Back *et al.*

Phys. Rev. Lett. **104**, 132501 (2010)

System size dependence of cluster properties from two-particle angular correlations in Cu+Cu and Au+Au collisions at $\sqrt{s_{\text{NN}}}=200$ GeV

B. Alver *et al.*

Phys. Rev. C **81**, 024904 (2010)

High transverse momentum triggered correlations over a large pseudorapidity acceptance in Au+Au collisions at $\sqrt{s_{\text{NN}}}=200$ GeV

B. Alver *et al.*

Phys. Rev. Lett. **104**, 062301 (2010)

System Size, Energy, and Centrality Dependence of Pseudorapidity Distributions of Charged Particles in Relativistic Heavy-Ion Collisions

B. Alver *et al.*

Phys. Rev. Lett. **102**, 142301 (2009)

Survey of Heavy-Ion Fusion Hindrance for Lighter Systems

C.L. Jiang, K.E.Rehm, B.B.Back, and R.V.F.Janssens
Phys. Rev. C **79**, 44601 (2009)

Spectroscopy of ^{257}Rf

J. Qian *et al.*
Phys. Rev. C **79**, 64319 (2009)

$K^\pi = 8^-$ isomers and $K^\pi = 2^-$ octupole vibrations in $N = 150$ shell-stabilized isotones

A. P. Robinson *et al.*
Phys. Rev. C **78**, 034308 (2008)

Scaling Properties in Bulk and pT-dependent Particle Production near Midrapidity in Relativistic Heavy Ion Collision

B. Alver *et al.*
Phys. Rev. C **80**, 11901 (2009)

Identified Charged Antiparticle to Particle Ratios near Midrapidity in Cu+Cu Collisions at $\sqrt{s_{NN}} = 62.4$ and 200 GeV

B. Alver *et al.*
Phys. Rev. C **77**, 061901(R) (2008)

The Importance of Correlations and Fluctuations on the Initial Source Eccentricity in High-Energy Nucleus-Nucleus Collisions

B. Alver *et al.*
Phys. Rev. C **77**, 014906 (2008)

Fusion hindrance for a positive Q-value system

C.L. Jiang *et al.*
Phys. Rev. C **78**, 017601, 2008)

A Solenoidal Spectrometer for Reactions in Inverse Kinematics

A. H. Wuosmaa, J. P. Schiffer, B. B. Back, C. J. Lister, K. E. Rehm
Nucl. Instr. Meth. **A580**, 1290 (2007)

Consequences of Energy Conservation in Relativistic Heavy-Ion Collisions.

B.B.Back
Phys. Rev. C **72**, 064906 (2005)

10 Most cited papers

The PHOBOS perspective on discoveries at RHIC

B.B.Back *et al.*
Nucl. Phys. **A757**, 28 (2005)

Charged particle multiplicity near mid-rapidity in central Au+Au collisions $\sqrt{s_{NN}} = 56$ and 130 GeV

B.B.Back *et al.*
Phys. Rev. Lett. **85**, 3100 (2000)

Startup of the Fragment Mass Analyser at Atlas

C.N.Davids *et al.*
Nucl. Instr. Meth. **B70**, 358 (1992)

Quasi-Fission: The Mass Drift Mode in Heavy Ion Reactions

J.Töke *et al.*
Nucl. Phys. **A440**, 327 (1985)

Fission of Doubly Even Actinide Nuclei Induced by Direct Reactions

B.B.Back, Ole Hansen, H.C.Britt, and J.D.Garrett
Phys. Rev. C **9**, 1924 (1974)

Fission and Quasifission in U-Induced Reactions

W.Q.Shen *et al.*
Phys. Rev. C **36**, 115 (1987)

Angular Distributions in Heavy Ion Induced Fission

B.B.Back *et al.*
Phys. Rev. C **32**, 195-213 (1985)

The Significance of the Fragmentation Region in Ultrarelativistic Heavy-Ion Collisions

B.B.Back *et al.*
Phys. Rev. Lett. **91**, 052303 (2003)

Precompound Emission of Light Particles in the Reaction $^{16}\text{O} + ^{238}\text{U}$ at 20 MeV/nucleon

T.C.Awes, G.Poggi, C.K.Gelbke, B.B.Back, B.G.Glagola, H.Breuer and V.E.Viola, Jr.
Phys. Rev. C **24**, 89 (1981)

Linear Momentum Transfer In Nonrelativistic Nucleus-Nucleus Reactions

V.E.Viola, Jr., B.B.Back, K.L.Wolf, T.C.Awes, C.K.Gelbke, and H.Breuer
Phys. Rev. C **26**, 178 (1982)