

PHYSICS DIVISION SEMINARS: OCTOBER 1996–SEPTEMBER 1998

Seminars arranged by the Physics Division and announced in the ORNL Technical Calendar are listed below. During the period of this report, S. (Ram) Raman served as Seminar Chairman.

1996

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| Oct. 9 | Phillip C. Stancil
University of Nevada
Las Vegas, Nevada | Atomic Collision Processes in Primordial
Molecule Formation and Supernovae |
| Oct. 21 | Dariusz Seweryniak
Argonne National Laboratory
Argonne, Illinois | Nuclear Structure Near and Beyond the
Proton Drip Line |
| Oct. 24 | Dennis R. LaFosse
Washington University
Saint Louis, Missouri | Medium-Mass Nuclei at the Extreme of
Deformation and Rotation |
| Nov. 4 | Robert Gallino
University of Torino, Italy | Isotope Anomalies in Interstellar Meteoritic
Grains |
| Nov. 11 | Alfredo Galindo-Uribarri
Chalk River Nuclear Laboratories
Ontario, Canada | Study of Extremely Deformed Nuclei at
High Angular Momentum |
| Dec. 5 | David C. Radford
Chalk River Nuclear Laboratories
Ontario, Canada | Coulomb Excitation Studies with the 8π
Spectrometer |
| Dec. 10 | Stuart Pittel
University of Delaware, Newark | Proton-Neutron Pair Correlations:
What, Why, Where, and How? |

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| Jan. 23 | Philippe Quentin
CENBG, Gradignan, France | Nuclear Intrinsic Vorticity and the Physics of
Superdeformed States |
| Feb. 6 | David Dean
Physics Division Staff | Shell-Model Monte Carlo Studies of Nuclei |
| Feb. 14 | Gary Sanders
California Institute of Technology
Pasadena, California | Searching for Gravitational Waves with
LIGO |
| Feb. 20 | Isidoro Kimel
University of Central Florida
Orlando, Florida | Electrostatic Accelerator Free-Electron Lasers
and High-Power applications |
| Feb. 24 | Marc Loiselet
Institut de Physique Nucleaire
Louvain-la-Neuve, Belgium | Currently Available Radioactive Beams at
Louvain-la-Neuve |

Mar. 20	Bertram Blank CEN Bordeaux, France	New Isotopes and Decay Studies Near the Proton Drip Line
Apr. 3	Marek Lewitowicz GANIL, Caen, France	Studies of Light Proton and Neutron Drip-Line Nuclei
Apr. 22	Yuri Zaitsev ITEP Moscow, Russia	B_0^- - B_0 Mixing: Ten Years Later
May 1	Uwe Greife Ruhr-Universität Bochum, Germany	Nuclear Astrophysics Experiments with Recoil Separators
May 8	Jürgen Gerl GSI, Darmstadt, Germany	Coulomb Excitation and Transfer Reaction Studies with the Miniball
May 13	Peter Jacobs Lawrence Berkeley National Lab. Berkeley, California	Single-Particle Spectra and Azimuthal Asymmetries in Pb + Pb Collisions at 158 GeV/nucleon
May 30	Andrej Kugler Nuclear Physics Institute, Řež, Czech Republic	Study of π^0 and η Azimuthal Distributions in $^{58}\text{Ni}+^{58}\text{Ni}$ Reaction at 2 GeV/nucleon
June 6	Yury Stavitsky Institute for Nuclear Research Moscow, Russia	Neutron Complex Based on the Proton Linac INR-RAS at Troitsk
June 13	Hubert Grawe GSI, Darmstadt, Germany	Tin-100 and Future Experiments Along the $N = Z$ Line
June 26	Richard Blankenbecler SLAC, Stanford, California	Bremsstrahlung Revisited
July 10	Bernard Zygelman University of Nevada, Las Vegas, Nevada	Aspects of the Atomic Collision Problem at Low Energy
July 24	M. Vasiliev Texas A&M University College Station, Texas	Transverse Flow in Au + Au Collisions at 150 and 250 MeV/nucleon
July 28	S. Y. Lee Indiana University Bloomington, Indiana	Chaos in Space-Charge Dominated Charged-Particle Beams
July 28	Doris Forkel CERN, Geneva, Switzerland	Solid-State Physics with Radioactive Beams at ISOLDE
Aug. 11	Attila Csoto Los Alamos National Laboratory Los Alamos, New Mexico	$^7\text{Be}(\mathbf{p},\gamma)^8\text{B}$ Reaction and the High-Energy Solar Neutrino Flux

Oct. 1	Ted Barnes Physics Division Staff	Exotic Mesons
Oct. 17	William Diamond AECL Chalk River Laboratory Ontario, Canada	Radioactive Ion Beams Production Using Electro-Fission
Nov. 4	Marek Pfutzner University of Warsaw, Poland	New Isotopes and Isomers Produced by the Fragmentation of ^{238}U Beam at 1000 MeV/u
Nov. 6	Georgios Lalazissis Technische Universität München München, Germany	Relativistic Hartree-Bogoliubov Description of Neutron-Rich Nuclei
Nov. 7	Piet Van Duppen Catholic University, Leuven, Belgium	Neutron-Rich Nickel Isotopes Produced by Resonant Photo-Ionization
Nov. 10	Peter Steinberg MIT, Cambridge, Massachusetts	Search for Disoriented Chiral Condensates in 158 A*GeV Pb+Pb Collisions
Nov. 20	Christopher Gould North Carolina State University Raleigh, North Carolina	Symmetry Tests with Neutrons: How Random is the Compound Nucleus?
Dec. 4	Patrick G. O'Shea Duke University Durham, North Carolina	Search for Bright Light
Dec. 4	Geoff Greene Los Alamos National Laboratory Los Alamos, New Mexico	Investigation of Fundamental Interactions with Low-Energy Neutrons
Dec. 11	Boris Z. Kopeliovich Joint Institute for Nuclear Research Dubna, Russia	Nuclear Suppression of Drell-Yan Pairs and Heavy Quarkonia
Dec. 18	Geoff Krafft Thomas Jefferson National Accelerator Facility Newport News, Virginia	Superconducting Accelerators and their Beam Diagnostic Instruments
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Jan. 9	Delbert J. Larson Integrated Accelerator Technologies DeSoto, Texas	A New Approach to PET Isotope Production
Feb. 6	Robert Svoboda Louisiana State University Baton Rouge, Louisiana	Question of Neutrino Mass and Mixing: Answered at Last?

Feb. 12	Dinesh K. Srivastava Variable Energy Cyclotron Centre Calcutta, India	A Parton Cascade Model and Quark Gluon Plasma Formation
Mar. 13	Helmut Winter Humboldt Universität Berlin, Germany	Ion--Surface Scattering
Mar. 19	Till von Egidy Universität München München, Germany	Proposed Experiments with Accelerated Fission Fragments
Apr. 2	Nicholas Stone Oxford University Oxford, United Kingdom	Nuclear Magnetic Moments near ^{132}Sn : Sub-Nucleon and Collective Effects
May 7	Marek Karny University of Warsaw Warsaw, Poland	Evidence for the Gamow-Teller Resonance in ^{100}Sn
May 26	Jerzy Szerypov University of Warsaw Warsaw, Poland	Applications of a Penning Trap
June 11	Zenon Janas University of Warsaw Warsaw, Poland	Beta Decays of ^{37}Ca and ^{40}Ti
July 14	Chris Laird Eastern Kentucky University Richmond, Kentucky	Proton Activation of Range-Thick Lead and Tungsten Targets at GeV Energies
July 20	James J. Kolata University of Notre Dame Notre Dame, Indiana	Near- and Sub-Barrier Fusion in the $^6\text{He} + ^{209}\text{Bi}$ System
July 31	Michael Kreisler Lawrence Livermore National Lab. Livermore, California	Nuclear Physics Efforts at Livermore
Aug. 13	Atsuto Suzuki Tohoku University Sendai, Japan	Neutrino Physics at Kamiokande, Super-Kamiokande, and KamLAND
Aug. 17	Carl Svensson McMaster University Hamilton, Ontario, Canada	Superdeformation and Band Termination in the $A \sim 60$ Region
Aug. 27	Fred Becchetti University of Michigan Ann Arbor, Michigan	Solenoidal Ion-Optical Lenses in Nuclear Reaction Studies

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| Sep. 10 | Karlheinz Langanke
University of Aarhus
Aarhus, Denmark | Recent Progress in Nuclear
Astrophysics |
| Sep. 17 | Didier Saumon
Vanderbilt University
Nashville, Tennessee | Evolution, Spectra, and Detectability of
Extrasolar Giant Planets |
| Sep. 24 | Sandip Pakvasa
University of Hawaii
Honolulu, Hawaii | Neutrino Oscillations: Current Status |