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NATIONAL RESEARCH COUNCIL OF CANADA

OCTOBER 2001

The contributions on individual experiments in this report are outlines intended to demonstrate the extent of scientific activity at TRIUMF during the past year. The outlines are not publications and often contain preliminary results not intended, or not yet ready, for publication. Material from these reports should not be reproduced or quoted without permission from the authors.

Appendix B

SEMINARS*

The following seminars were presented at TRIUMF this year.

06/01 *A New Proposal for a Precision Measurement of the Muon Lifetime*, David Hertzog, U. Illinois at U-C.
07/01 *New Results on the Muon Anomalous Magnetic Moment*, David Hertzog, U. Illinois at Urbana-Champaign.
10/01 *Early Data from BELLE*, Daniel Marlow, Princeton U.
11/01 *Ground-Based Gamma Ray Astronomy with STACEE*, Ken Ragan, McGill U.
12/01 *New Results from E787*, Paul Bergbusch, UBC.
18/01 *Effective Field Theory for Two Nucleons*, Thomas Mehen, Caltech.
20/01 *Electron Neutrino Studies with ^{100}Mo by Double-Beta Decays and Solar ν Induced Inverse-Beta Decays*, Hiro Ejiri, U. Washington.
25/01 *New CLEO Results on Rare and Radiative B Decays*, Vladimir Savinov, SLAC.
01/02 *Few-Body Nuclear Physics in the Big Bang*, Ken Nollett, U. Chicago.
03/02 *Neutrino Flavour Mixing: Theory and Phenomenology*, Christian Cardall, SUNY at Stonybrook.
11/02 *KEK-Tanashi Short Lived Nuclear Beam Facility*, Ichiro Katayama, KEK Tanashi.
15/02 *Photoproduction of Pseudoscalar Mesons from Nuclei*, Laith Abu-Raddad, Florida State U.
16/02 *Solar Neutrinos and Neutral Current Detection at SNO*, Steve Elliot, U. Washington.
17/02 *Isotope Shift Measurements in Neutron Deficient Francium Atoms*, Matt Pearson, SUNY at Stonybrook.
18/02 *Effective Field Theory for Two-Nucleon Systems*, Gautam Rupak, U. Washington.
21/02 *Characterization and Control of Ultracold Collisions*, Steve Gensemer, U. Connecticut.
29/02 *Measurements of $|V_{cs}|$ in W Decays with the OPAL Detector*, Alain Bellerive, U. Chicago.
02/03 *Low-Energy Manifestations of Supersymmetry*, Hitoshi Murayama, U. California, Berkeley.
03/03 *Neutrino Currents in Supernova Core*, Gang Li, Indiana U.
16/03 *Experimental Studies of the Coulomb Dissociation of the Radioactive Beam Boron-8*, Brad Davids, MSU/NSCL.
17/03 *New Particles and Physics at the Energy Frontier*, Rick Van Kooten, Indiana U.
23/03 *PRISM*, Noboru Sasao, U. Kyoto.
30/03 *Measurements of Muon Catalyzed Fusion in Solid HD*, Tracy Porcelli, UNBC.
07/04 *Neutrino Factories: A New Tool for Physics*, Steve Geer, Fermilab.
13/04 *Pion Physics*, Gerhard Wagner, U. Tübingen.
02/05 *Mini Review on OZI Violation and the Role of Strangeness in Proton-Antiproton Annihilation at Rest*, Milan Locher, PSI and U. Zürich.
04/05 *(Mostly) Nuclear Astrophysics and (a Little) Weak Interactions Using Radioactive Beams at TAMU*, Bob Tribble, Texas A&M U.
11/05 *Still Flat After All These Years*, Douglas Scott, UBC.
15/05 *Ultra-Sensitive Detection by Laser Spectroscopy*, H.A. Schuessler, Texas A&M U.
19/05 *Circular Rydberg States and Quantum Entanglement Experiments*, Sihong Gu, Max-Planck-Institut für Quantenoptik, U. München.
23/05 *Director Search Public Lecture*, Pekka Sinervo, U. Toronto.
29/05 *The Proton Drivers for the CERN Neutrino Factory Study*, Horst Schoenauer, CERN.
01/06 *Recent Progress in AMS at IsoTrace*, Ted Litherland, U. Toronto.
19/06 *Director Search Public Lecture, TRIUMF: Nuclear Astrophysics and Beyond*, Alan Shotter, U. Edinburgh.
21/06 *Director Search Public Lecture, Three Generations of Quarks and Leptons: Who Ordered That?*, Douglas Bryman, UBC.
28/06 *Bose Einstein Condensation and Ultracold Molecules*, Roahn Wynar, U. Texas at Austin.
10/07 *Stochastic Cooling: History & Recent Results*, Fritz Caspers, CERN.
12/07 *RIA: The Next Generation Radioactive Beams Project in the USA*, Guy Savard, ANL.
13/07 *The KARMEN Time Anomaly: Search for a Neutral Particle of Mass 33.9 MeV in Pion Decay*, Jason Koglin, U. Virginia.
20/07 *Large Extra Dimensions and Neutrinos*, Gail McLaughlin, TRIUMF.
27/07 *Search for Neutralino Dark Matter and the PICASSO project*, Viktor Zacekv, U. Montréal.
28/07 *Measurement of the Parity-Violating Asymmetry in the Scattering of Polarized Electrons from Protons*, Gary Rutledge, College of William & Mary.
04/08 *Charge Symmetry Breaking in $np \to \pi^0$ and QCD*, Ubirajara van Kolck, Caltech/U. Arizona.
10/08 *Selected Weak Interactions in Hadrons and Nuclei with Effective Field Theory*, Roxanne Springer, Duke U.
15/08 *Effective Field Theory at Finite Density: Dilute Fermi Systems*, Hans Hammer, Ohio State U.
17/08 *The CDF Silicon Tracker for the Tevatron Run II*, Igor Volobouev, LBNL.

11/09 *Study of the Light Meson Spectroscopy at BNL E852*, Jingliang Hu, Jefferson Lab.

14/09 *LIGO and Prospects for Detection of Gravitational Waves*, Barry Barish, Caltech.

15/09 *The Mystery of Ultrahigh Energy Cosmic Rays: Exotic and Not-So-Exotic Hypotheses and the Pierre Auger Observatory*, John Swain, Northeastern U.

21/09 *Measurement of the Pion Light-Cone Wave Function*, Danny Ashery, Tel-Aviv U.

06/10 *The Parton Model and the Mossbauer Effect – From Crystals with Synchrotron Radiation to Heavy Quarks*, Harry Lipkin, Weizmann Inst.

12/10 *Clustering in Nuclei: Nuclear Chains, Nuclear Molecules, and Other Exotic States of Nuclear Matter*, Brian Fulton, York U.

16/10 *Problems in Treatment of Fields with Spin 3/2 and Higher*, Vladimir Pascalutsa, U. Flinders.

24/10 *Nuclear Astrophysics at the Ruhr-Universität Bochum: Direct Measurements of Important Nuclear Reaction Cross Sections*, Frank Strieder, U. Bochum.

26/10 *A Covariant Model of Pion-Nucleon Scattering*, Andrew Lahiff, TRIUMF.

03/11 *ISOLDE: Present Status and Future Plans*, Mats Lindroos, CERN.

06/11 *Energy Measurement in the Forward Region of the ATLAS Detector at LHC*, Peter Loch, U. Arizona.

08/11 *Latest Developments at the RIB Cyclotron Facility in Louvain La Neuve*, Marc Loiselet, U. Catholique de Louvain.

09/11 *40 Years of Nuclear Parity Violation*, Barry Holstein, U. Massachusetts.

24/11 *A Physics Program Based on a New Asymmetrical $e-p$ Collider in the Energy Regime $1.4 < \sqrt{s} < 2.5$ GeV*, Rinaldo Baldini, INFN-LNF.

29/11 *Development, Operation, and Applications of the National Accelerator Centre Cyclotrons*, Lowry Conradie, NAC Laboratory, Cape Town.

30/11 *A 2nd Generation Long Baseline Neutrino Experiment – Neutrino Program at JHF*, Akira Konaka, TRIUMF.

14/12 *QCD Results from LEP*, Hasko Stenzal, Max-Planck-Institut, München.

The following lunchtime seminars were presented at TRIUMF this year.

09/06 *Neutrino Experiment at JHF*, Akira Konaka, TRIUMF.

07/09 *Beta-NMR at ISAC*, Gerald Morris, TRIUMF/UBC.

06/11 *Report on the IEEE Nuclear Science Symposium and Medical Imaging Conference – Detector Developments and Data Acquisition*, Joel Rogers and Renée Poutissou, TRIUMF.

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* All matters concerning TRIUMF seminars should be referred via e-mail to seminar@triumf.ca

The latest listing of TRIUMF seminars can be seen at http://www.triumf.ca/seminars/