

# Parity Violation International Workshop (PAVI) 2009



Bar Harbor, ME

MONDAY, JUNE 22

| Morning      | Session Chair: S. Kowalski     | Gates Auditorium                                                                                                                             |
|--------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| 8:25am       | Stanley Kowalski (MIT)         | Welcome and Introduction                                                                                                                     |
| 8:30         | David Armstrong (W&M)          | Parity-Violating Electron Scattering on Hydrogen and Deuterium at Backward Angles: G0 Experiment (45)                                        |
| 9:15         | Sebastian Baunack (UMainz)     | A4-Mainz (30)                                                                                                                                |
| 9:45         | Kent Paschke (UVA)             | HAPPEX-III (30)                                                                                                                              |
| <b>10:15</b> | <b>Coffee</b>                  | <b>Kaelber Hall</b>                                                                                                                          |
| 10:45        | Wolfram Weise (UMunich)        | Low-Energy QCD and Strangeness in the Nucleon (30)                                                                                           |
| 11:15        | Jens Erler (UMexico)           | Electroweak Corrections (30)                                                                                                                 |
| <b>12:00</b> | <b>Lunch</b>                   | <b>Kaelber Hall</b>                                                                                                                          |
| Afternoon    | Session Chair: R. Carlini      | Gates Auditorium                                                                                                                             |
| 2:00pm       | Barry Holstein (Umass)         | Hadronic PV Overview (45)                                                                                                                    |
| 2:45         | Chris Crawford (UKentucky)     | NPD Gamma Experiment: from LANSCE to the SNS (30)                                                                                            |
| 3:15         | Valery Nesvizhevsky (Grenoble) | ${}^6\text{Li} + n \rightarrow {}^3\text{H}$ (30)                                                                                            |
| <b>3:45</b>  | <b>Coffee</b>                  | <b>Kaelber Hall</b>                                                                                                                          |
| 4:15         | Hartmut Abele (ViennaUTech)    | Survey of Neutron Beta Decay (30)                                                                                                            |
| 4:45         | Hiro Ejiri (OsakaU)            | Neutrinoless Double Beta Decay: Overview (30)                                                                                                |
| 5:15         | Alexander Glushkov (Odessa SU) | Electron - $\beta$ - Nuclear Spectroscopy of Atoms and Molecules: Bound Beta-Decay and Decay of Isomeric States for Fully Ionized Atoms (20) |
| 5:35         | Olga Yu Khetselius (Odessa SU) | Relativistic Many-Body Perturbation Theory: Atomic Parity Nonconserving Effects in Heavy Atomic Systems (20)                                 |

# Parity Violation International Workshop (PAVI) 2009



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6:30

Dinner

Kaelber Hall

TUESDAY, JUNE 23

| Morning | Session Chair: K. deJager     | Gates Auditorium             |
|---------|-------------------------------|------------------------------|
| 8:30am  | Michael Ramsey-Musolf (UWisc) | Electroweak PV Overview (45) |
| 9:15    | Shelley Page (UMan)           | QWeak-JLab (30)              |
| 9:45    | Krishna Kumar (UMass)         | Moller_12GeV-JLab (30)       |
| 10:15   | Coffee                        | Kaelber Hall                 |
| 10:45   | Xiaochao Zheng (UVA)          | PVDIS at 6GeV-JLab (30)      |
| 11:15   | Paul Souder (USyracuse)       | PVDIS_12GeV-JLab (30)        |
| 12:00   | Lunch                         | Kaelber Hall                 |

| Afternoon | Session Chair: S. Page          | Gates Auditorium                                                        |
|-----------|---------------------------------|-------------------------------------------------------------------------|
| 2:00pm    | Dmitry Budker (UCBerkeley)      | Observation of Large Atomic Parity-Violation Effect in Ytterbium (45)   |
| 2:45      | Bob Dunford (ANL)               | Parity Nonconservation in Hydrogen: Revisited (30)                      |
| 3:15      | Maarten de Kieviet (Heidelberg) | Atomic PV in Hydrogen (30)                                              |
| 3:45      | Coffee                          | Kaelber Hall                                                            |
| 4:15      | Mikhail Gorshteyn (IndianaU)    | Hadronic Structure Effects in Parity Violating Electron Scattering (30) |
| 4:45      | Ed Kearns (BostonU)             | A Search of the Neutrino Landscape (30)                                 |
| 6:30      | Dinner                          | Kaelber Hall                                                            |
| 8:00      | Poster Session                  | Turrets                                                                 |

# Parity Violation International Workshop (PAVI) 2009



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WEDNESDAY, JUNE 24

## Morning

|        |                        |              |
|--------|------------------------|--------------|
| 8:30am | Whale/Puffin Boat Tour |              |
| 12:30  | Lunch                  | Kaelber Hall |

## Afternoon

Session Chair: P. Reimer

Gates Auditorium

|             |                            |                                                                                 |
|-------------|----------------------------|---------------------------------------------------------------------------------|
| 2:00pm      | Mark Pitt (VirginiaT)      | Instrumentation for PV Electron-Scattering Experiments (45)                     |
| 2:45        | Kurt Aulenbacher (UMainz)  | Polarized Sources (30)                                                          |
| 3:15        | Gordon Cates (UVA)         | Helicity Reversal and Systematics (30)                                          |
| <b>3:45</b> | <b>Coffee</b>              | <b>Kaelber Hall</b>                                                             |
| 4:15        | Eugene Chudakov (JLab)     | Beam Polarimetry (30)                                                           |
| 4:45        | Greg Smith (JLab)          | High Power Cryo-Targets (30)                                                    |
| 5:15        | Jurgen Diefenbach (MainzU) | Recent Results from the A4 Laser Compton Polarimeter at MAMI (20)               |
| 5:35        | Wouter Deconinck (MIT)     | Precision Compton Polarimetry for the $Q_{\text{weak}}$ Experiment at JLab (20) |
| <b>6:30</b> | <b>Dinner</b>              | <b>Kaelber Hall</b>                                                             |

# Parity Violation International Workshop (PAVI) 2009



Bar Harbor, ME

THURSDAY, JUNE 25

| Morning      | Session Chair: B. Holstein    | Gates Auditorium                                                                    |
|--------------|-------------------------------|-------------------------------------------------------------------------------------|
| 8:30am       | Rob Timmermans (KVI)          | EDM Summary/Overview (45)                                                           |
| 9:15         | Blayne Heckel (UWash)         | EDM-Hg (30)                                                                         |
| 9:45         | Rob Timmermans (KVI)          | Nuclear Beta Decay: Overview (30)                                                   |
| <b>10:15</b> | <b>Coffee</b>                 | <b>Kaelber Hall</b>                                                                 |
| 10:45        | Matthias Schindler (OhioU)    | Hadronic Parity Violation<br>in Pionless Effective<br>Field Theory (30)             |
| 11:15        | Robert Michaels (JLab)        | Lead Radius Experiment, PREX:<br>An Update (30)                                     |
| <b>12:00</b> | <b>Lunch</b>                  | <b>Kaelber Hall</b>                                                                 |
| Afternoon    | Session Chair: D. Armstrong   | Gates Auditorium                                                                    |
| 2:00pm       | Michael Kohl (HamptonU)       | Elastic Nucleon Form Factor<br>Experiments - A Serial Story (30)                    |
| 2:30         | Jan Bernauer (UMainz)         | Low-Q $G_E^p$ , $G_M^p$ (20)                                                        |
| 2:50         | Andrej Afanasev (HamptonU)    | Transverse Spin Asymmetries in<br>Elastic Electron Scattering (30)                  |
| <b>3:20</b>  | <b>Coffee</b>                 | <b>Kaelber Hall</b>                                                                 |
| 3:50         | Bastian Kubis (BonnU)         | Charge Symmetry Violation (30)                                                      |
| 4:20         | Silas Beane (UNH)             | Parity Violation and<br>Lattice QCD (30)                                            |
| 4:50         | Juliette M. Mamei (VirginiaT) | Transverse Beam Asymmetries:<br>$G^0$ Backward Angle (20)                           |
| 5:10         | David Belaguer Rios (MainzU)  | Two Photon Exchange and<br>Transverse Spin Asymmetries in<br>the A4 Experiment (20) |
| <b>6:30</b>  | <b>Workshop Dinner</b>        | <b>Kaelber Hall</b>                                                                 |

# Parity Violation International Workshop (PAVI) 2009



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FRIDAY, JUNE 26

| Morning      | Session Chair: P. Souder      | Gates Auditorium                                                                                                                         |
|--------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 8:30am       | James Miller (BU)             | $\mu > e$ Conversion (30)                                                                                                                |
| 9:00         | Mike Snow (IndianaU)          | Neutron Spin Rotation (30)                                                                                                               |
| 9:30         | John Schaub (NMSU)            | Global Analysis of the Strangeness Vector and Axial Vector Form Factors of the Nucleon and Their Uncertainties (20)                      |
| 9:50         | Riad Suleiman (JLab)          | Jefferson Lab Injector Development for Next Generation Parity Experiments (20)                                                           |
| <b>10:10</b> | <b>Coffee</b>                 | <b>Kaelber Hall</b>                                                                                                                      |
| 10:40        | Steven Linden (YaleU)         | Measurement of the $\nu_\mu$ Charged Current $\pi^+$ to Quasi-Elastic Cross Section Ratio on Mineral Oil in a 0.8 GeV Neutrino Beam (20) |
| 11:00        | Luigi Capozza (MainzU)        | Background Studies for the A4 Experiment (20)                                                                                            |
| 11:20        | Fatiha Benmokhtar (CMU)       | Analysis of the $G^0$ Backward Angle Experiment (20)                                                                                     |
| <b>12:00</b> | <b>Lunch</b>                  | <b>Kaelber Hall</b>                                                                                                                      |
| Afternoon    | Session Chair: F. Maas        | Gates Auditorium                                                                                                                         |
| 2:00pm       | David Hertzog (Uillinois)     | g-2 (30)                                                                                                                                 |
| 2:30         | Abhay Deshpande (Stony Brook) | EIC (45)                                                                                                                                 |
| <b>3:15</b>  | <b>Coffee</b>                 | <b>Kaelber Hall</b>                                                                                                                      |
| 3:45         | Michael Schmitt (NWU)         | LHC Electroweak (45)                                                                                                                     |
| 4:30         | William Marciano (BNL)        | <b>Conference Summary (45)</b>                                                                                                           |
| <b>6:30</b>  | <b>Dinner</b>                 | <b>Kaelber Hall</b>                                                                                                                      |