

2009 Workshop on Lepton and Baryon Number Violation (LBV09)

University of Wisconsin-Madison
Physics Department, 5280 Chamberlin Hall

September 21-23, 2009

AGENDA

Organizers:

Baha Balantekin
Vernon Barger
Linda Dolan
Pavel Fileviez Perez (co-Chair)
Tao Han
Michael J. Ramsey-Musolf (co-Chair)

Monday, September 21

9:00 - 9:15 Welcome

Chairman: Baha Balantekin

9:15 - 9:50 P. Nath *"Progress towards a more unified SO(10) model and proton stability"*

9:50 - 10:25 E. Kearns *"Experimental Searches for Baryon Number Violation"*

10:25 -10:55 **Coffee Break**

Chairman: Pran Nath

10:55 - 11:30 B. Gavela *"Minimal Flavour Seesaw"*

11:30 - 12:05 B. Bajc *"Probing Seesaw and Leptonic CPV"*

12:05 - 2:30 **Lunch**

Chairman: Ed Kearns

2:30 - 2:55 A. Atre *"Search for Heavy Majorana Neutrinos"*

2:55 - 3:20 K. Wang *"Probing B/L Violation in Extended Scalar Models at the LHC"*

3:20 - 3:45 S. Spinner *"A Mechanism for Spontaneous R-parity Violation"*

3:45 - 4:15 **Coffee Break**

Chairman: Yingchuang Li

4:15 - 4:50 P. Langacker *"Alternatives to the GUT seesaw"*

4:50 - 5:25 A. Pilaftsis *"Supersymmetric Lepton Flavour Violation"*

5:25 - 6:00 W. Porod *"Testing supersymmetric neutrino mass models at the LHC"*

Tuesday, September 22

Chairman: *Vernon Barger*

- 9:00 – 9:35 S. Raby *“Testing SO(10) SUSY GUTs with family symmetries“*
- 9:35 – 10:10 C. Wagner *“Baryon number violation and TeV Baryogenesis in Extensions of the MSSM“*
- 10:10 – 10:45 I. Dorsner *“On d=6 proton decay operators“*
- 10:45 – 11:15 **Coffee Break**

Chairman: *Stuart Raby*

- 11:15 – 11:50 J. Pati *“Proton Decay: The Missing Piece Of Grand Unification“*
- 11:50 – 12:25 K. Agashe *“Exotic Dark Matter at Colliders as Spin-Off of Proton Stability“*
- 12:25 - 2:15 **Lunch**

Chairman: *Sonny Mantry*

- 2:15 – 2:40 S. Blanchet *“Probing leptogenesis at the LHC“*
- 2:40 - 3:05 S. Tulin *“Leptogenesis with Color Octets“*
- 3:05 - 3:30 J. Kile *“Light Hidden Fermionic Dark Matter in Neutrino Experiments“*
- 3:30 - 4:00 **Coffee Break**

Chairman: *Ilja Dorsner*

- 4:00 - 4:35 Y. Kamyshkov *“Neutron-antineutron transformation search. Where experiment can reach?“*
- 4:35 - 5:10 K. Babu *“Neutron-antineutron oscillations and weak scale baryogenesis“*
- 5:10 - 5:45 J. Engel *“Many-body physics and double-beta decay“*

Wednesday, September 23

Chairman: *Tao Han*

9:00 – 9:35 A. Nelson *“New light gauge boson and apparent CPT violation in neutrino oscillations”*

9:35 – 10:10 M. Carena *“Electroweak Baryogenesis”*

10:10 – 10:45 S. Lavignac *“A predictive $SO(10)$ scenario for leptogenesis and flavour violation”*

10:45 – 11:15 **Coffee Break**

Chairman: *Sky Bauman*

11:15 – 11:50 Y. Aoki *“Hadronic matrix elements of proton decay from lattice QCD”*

11:50 – 12:25 B. Garbrecht *“The Diffusion Process in Electroweak Baryogenesis”*

12:25 - 2:15 **Lunch**

Chairman: *Marcela Carena*

2:15 – 2:50 B. Mellado *“Multi-lepton final states and lepton number violation at the LHC”*

2:50 – 3:25 A. Friedland *“Supernova neutrinos: time-varying flavor transformations”*

3:25 - 3:50 A. Mustafayev *“SUSY dark matter and lepton flavor violation”*

3:50 - 4:20 **Coffee Break**

Chairman: *Michael J. Ramsey-Musolf*

4:20 - 5:05 G. Senjanovic *“Summary Talk: Lepton and Baryon Number Violation in 2009”*

5:05 - 5:10 P. Fileviez Perez *“Final Remarks”*