

# CHEP

## McGill Centre for High Energy Physics

### Seminars 2005-2006

- [Joint Seminars \(with the Université de Montréal\)](#)
  - [Experimental High Energy Physics](#)
  - [Theoretical High Energy Physics \("pizza"\)](#)
  - [Theoretical Nuclear Physics](#)
  - [Astro-Particle Physics](#)
  - [Special High Energy Physics Seminars and Workshops](#)
- 

### List of High Energy Physics Experimental Joint Seminars (with the Université de Montréal) for 2005-2006

1. *The ATLAS experiment: construction and supervision*, Helfried J. Burckhart, CERN, August 4th, 2005.
2. *Search for Technicolor Particle at D0*, Lorenzo Feligioni, Boston University, August 23rd, 2005.
3. *A Search for the Rare Decay  $B \rightarrow \tau + \tau^-$  at the BaBar Experiment*, Chris Potter, University of Oregon, August 24th, 2005.
4. *Calibration of the ATLAS electromagnetic calorimeter. Reconstruction of events with non-pointing photons from GMSB SUSY models*, Damien Prieur, Laboratoire d'Annecy de Physique des Particules, August 26th, 2005.
5. *Probing the Weak Interaction Spacetime Structure with Muon Decay*, Art Olin, TRIUMF, October 4th, 2005.
6. *CASTing for Solar Axions at CERN*, Michael Hasinoff, Univ. of British Columbia, December 2nd, 2005.
7. *The ATLAS strategy for Higgs detection*, Cibrán Santamarina Rios, CERN, December 1st, 2005.
8. *Charm School for Physicists: On the Impact of CLEO-c Results*, David Asner, Carleton University, November 30th, 2005.

9. *Search for gaugino production in R-parity violating supersymmetry at HERA*, Chi-Nhan Nguyen, Hamburg Universität, December 14th, 2005.
10. *Light Scalar Top Quarks and Dark Matter at the Linear Collider*, Caroline Milstene, Fermilab, December 15th, 2005.
11. *B -> phi K\* Decays: short story about CP Violation, Strong Interactions and New Physics*, Alejandro Szykman, U. Montreal, January 18th, 2006.
12. *Searching for Dark Matter with DEAP at SNOLAB*, Marc Boulay, Queen's University, February 8th 2006.
13. *New Research Opportunities at the Future FAIR facility in Darmstadt (Germany)*, Marielle Chartier, Univ. of Liverpool, February 9th, 2006.
14. *Neutrinos and Higgs bosons in the left-right model*, Ken Kiers, U. Montreal, February 10th, 2006.
15. *Measurements of charmed hadrons production in deep inelastic scattering with ZEUS*, Roberval Walsh, McGill University, February 15th, 2006.
16. *More on the Adiabatic Approximation in Quantum Mechanics*, Richard Mackenzie, U. Montreal, February 22nd, 2006.
17. *Supersymmetric dark matter: astroparticle and collider physics*, Geneviève Bélanger, LAPPTH, Annecy-le-Vieux, March 1st, 2006.
18. *Flavor Physics: A window of Opportunities*, Balaji Katlai, McGill, March 9th, 2006.
19. *Neutralino annihilation beyond leading order*, Heather Logan, Carleton University, Ottawa, March 29th, 2006.
20. *New B Physics Results from DZero*, Wendy Taylor, York University, April 6th, 2006.
21. *Dust during Reionization*, Erik Elfgren, Luleå, Suède, April 13th, 2006.
22. *Probing the Opposite Ends of Time with the Cosmic Microwave Background Radiation*, Matt Dobbs, McGill University, April 27th, 2006.
23. *Transverse Polarization of Muons in K-> pi^0 mu nu Decay as a test of Time Reversal Invariance*, Chary Rangacharyulu, Univ. Saskatchewan, May 23rd, 2006.

## List of High Energy Physics Experimental Graduate Student Seminars for 2005-2006

1. *Monte Carlo Production at the Collider Detector at Fermilab (pdf)*, Phillippe Roy, McGill University, September 7th, 2005.

2. *HEP Home Movies*, Francois Corriveau, McGill University, September 21st, 2005.
  3. *Primary Vertex Study for the lepton+jets top Signature at CDF ( ppt)*, Adrian Buzatu, McGill University, September 28th, 2005.
  4. *A discussion of the HESS detection of high-energy gamma-rays from an X-ray binary*, Thomas Lindner, McGill University, October 5th, 2005.
  5. *Overview of single top searches at D0*, Camille Belanger-Champagne, McGill University, October 12th, 2005.
  6. *Some things they don't tell you about least squares fitting*, Luis Valcarcel, McGill University, October 19th, 2005.
  7. *Using Neural Networks in Experimental High Energy Physics*, Chris Potter, McGill University, November 2nd, 2005.
  8. *Selected topics in Rare B Physics*, Joachim Harnois-Deraps, McGill University, November 16th, 2005.
  9. *HEP Seminar: CLEO Charm School*, David Asner (Carleton), McGill University, November 30th, 2005.
  10. *The GlueX Experiment*, Greg Williams, McGill University, January 18th, 2006.
  11. *The HESS array of ACT's*, Carsten Mueller, McGill University, February 1st, 2006.
  12. *Primary vertex studies for top event candidates at CDF*, Adrian Buzatu, McGill University, March 1st, 2006.
  13. *X-ray polarimetry*, Michael McCutcheon, McGill University, March 8th, 2006.
  14. *Recent results on new meson states from BABAR*, Ben Campbell, McGill University, March 22nd, 2006.
  15. *Lattice QCD and meson decay constants*, Guy Moore, McGill University, April 5th, 2006.
  16. *Detector systems for CMB*, Matt Dobbs, McGill University, April 19th, 2006.
  17. *ILC Calorimetry*, Francois Corriveau, McGill University, April 26th, 2006.
  18. *The AGILE gamma-ray telescope*, John Kildea, McGill University, May 10th, 2006.
  19. *BABAR measurement of  $B \rightarrow l\nu$  with hadronic tag  $B$  reconstruction*, Miika Klemetti, McGill University, May 31st, 2006.
- 

## List of High Energy Physics Theory "Pizza" Seminars for 2005-2006

1. *Progress in the Gauge Theory/Gravity Correspondence*, Jeff Murugan, Brown University and University of Cape Town, June 7th, 2005.
2. *Mass-radius relations for solitonic stars*, Prashanth Jaikumar, Argonne National Lab, July 5th, 2005.
3. *Non-Perturbative Instabilities as a Solution of the Cosmological Moduli Problem*, Natalia Shuhmaher, McGill University, September 13th, 2005.
4. *Thermalization after inflation in SUSY*, Rouzbeh Allahverdi, TRIUMF, Vancouver, September 23th, 2005.
5. *Gravity and Gauge Theory*, Keshav Dasgupta, McGill University, September 27th, 2005.
6. *Inflation with the QCD axion*, Thorsten Battefeld, Brown University, October 4th, 2005.
7. *Multibrane Inflation*, Jim Cline, McGill University, October 11th, 2005.
8. *Leaving the Swampland: The Relevance of String Dynamics*, Sera Cremonini, Brown University, October 18th, 2005.
9. *The role of plasma instabilities in quark-gluon plasma equilibration*, Peter Arnold, University of Virginia, October 25th, 2005.
10. *Inflation with  $w=+1$* , Subodh Patil, McGill University, October 25th, 2005.
11. *Self-T-Dual Brane Cosmology and The Cosmological Constant*, Olindo Corradini, Universita' di Bologna, November 8th, 2005.
12. *Flavor backreacted supergravity backgrounds and meson Regge trajectories*, Diana Vaman, University of Michigan, November 22nd, 2005.
13. *Cosmological Aspects of Loop Quantum Gravity*, Johannes Brunnemann, Max-Planck-Institut fuer Gravitationsphysik Potsdam (Germany), November 24nd, 2005.
14. *Non-equilibrium Physics of the Very Early Universe*, Dmitry Podolsky, CITA, Toronto, November 29th, 2005.
15. *Gauge Theories from String Theory: Geometric Transitions*, Anke Knauf, Maryland University & Hamburg U, Inst. Theor. Phys. II, December 2nd, 2005.
16. *Present and Future Constraints on the Total Lifetime of the Universe*, Jan Michael Kratochvil, Stanford University, December 6th, 2005.
17. *Supersymmetric Dirac Leptogenesis and Neutrino Phenomenology*, Manuel Toharia, University of Michigan, January 5th, 2006.
18. *Gravitational Waves in a Codimension Two Braneworld*, Claudia de Rham, McGill University, January 10th, 2006.

19. *A graceful exit for Old Inflation and a solution to the Hierarchy Problem*, Alessio Notari, McGill University, January 17th, 2006.
20. *Producing a scale-invariant spectrum of perturbations in a hagedorn phase of string cosmology*, Ali Nayeri, Harvard University, Phys. Dept, January 13th, 2006.
21. *Supersymmetry on the Lattice*, Joshua Elliott, McGill University, January 24th, 2006.
22. *String Theory and Cosmology*, Horace Stoica, McGill University, January 31th, 2006.
23. *Illuminate the dark energy and see the backreaction! Take the universe as it is: structured FRW*, Reza Mansouri, McGill University, January 31th, 2006.
24. *Confining the electroweak model to a brane*, Gonzalo Palma, Cambridge University, February 8th, 2006.
25. *Nongaussianity and Spectral Distorsion from Tachyonic Preheating*, Neil Barnaby, McGill, February 14th, 2005.
26. *Towards an Alternative to Inflationary Cosmology*, Robert Brandenberger, McGill University, February 28th, 2006.
27. *Early stages of the universe: brane gas-driven bulk dynamics*, Natalia Shuhmaher, McGill University, March 14th, 2006.
28. *Possible Origin of Dark Matter as a Fluctuating Remnant of Inflation*, Robert Brout, Université Libre de Bruxelles (ULB), March 21th, 2005.
29. *A road towards reheating  $MS(SM)$  degrees of freedom*, Anupam Mazumdar, Nordita, Denmark, March 23rd, 2006.
30. *Inflationary spectral indices and potential reconstruction*, Loison Hoi, McGill University, April 11th, 2005.
31. *The Boundary as Distant Stars: Mach's Principle in General Relativity*, Justin Khoury, Perimeter Institute, April 18th, 2005.
32. *Accelerated expansion from structure formation*, Syksy Rasanen, University, April 25th, 2005.
33. *Dynamics of the string theory landscape*, Senarath de Alwis, Perimeter Inst. Theor. Phys. & Colorado University, April 25th, 2005.
34. *Black hole singularities in Yang-Mills theories*, Guido Festuccia, MIT, May 2nd, 2005.
35. *D-strings, Supergravity Cosmic Strings and Fermion Zero Modes*, Anne-Christine Davis, (Cambridge University, DAMTP), May 4th, 2006.
36. *Orientifolds and Bubbling Geometries in String Theory*, Sunil Mukhi, Tata Institute, May 9th, 2006.

37. *Decoherence and Primordial Fluctuations*, Patrick Martineau, (McGill University), May 16th, 2006.
  38. *Particle physics catalysis of thermal Big Bang Nucleosynthesis*, Maxim Pospelov, University of Victoria/Perimeter Institute, May 19th, 2006.
  39. *Mimicking Lambda with a spin-two ghost condensate*, Claudia de Rham, McGill University, May 26th, 2006.
  40. *Nonlinearity in the gravitational lensing and its applications to cosmology*, Marina Shmakova, University, May 30th, 2006.
- 

## List of Nuclear Physics Theory Seminars for 2005-2006

1. *Heavy Ion Collisions, Diffusion, AdS/CFT, and the Euclidean Lattice*, Derek Teaney, Stony Brook University, October 20th, 2005.
2. *Penetrating Probes of the Quark-Gluon Plasma in Nuclear Collisions at RHIC and the LHC*, Brian Cole, Columbia University, November 4th, 2005.
3. *Nuclear modification of jet multiplicities*, Igor Dremin, Lebedev Institute, November 15th, 2005.
4. *Plasma Instabilities in the Melting Color Glass Condensate*, Paul Romatschke, Bielefeld University, November 16th, 2005.
5. *Quark Recombination*, Rainer Fries, University of Minnesota, November 18th, 2005.
6. *Thermodynamics of large  $N_f$  at finite chemical potential for weak and strong couplings*, Andreas Ipp, Institute for Nuclear Theory, Trento, November 25th, 2005.
7. *Parton Recombination: A comprehensive model for bulk hadronization at RHIC?*, Stephan Bass, Duke University, December 2nd, 2005.
8. *Parton propagation in dense nuclear matter*, Ivan Vitev, Los Alamos National Laboratory, February 2nd, 2006.
9. *Particle production in a field theory coupled to a strong external source*, François Gelis, SPhT, Saclay, February 13th, 2006.
10. *Anisotropy of flow and the order of phase transition in relativistic heavy ion collisions*, Pasi Huovinen, University of Virginia, February 14th, 2006.
11. *Space-time evolution of bulk QCD matter at RHIC: 3-D hydro + UniversityQMD model*, Chiho Nonaka, University of Minnesota, February 16th, 2006.
12. *Parton propagation in dense nuclear matter*, Ivan Vitev, Los Alamos National Laboratory, March 7th, 2006.

13. *Critical point of strongly interacting matter: would it be observed?*, Rashid Mehdiyev, Université de Montréal, April 5th, 2006.
  14. *Particle production in field theories coupled to strong external sources*, Raju Vanugopalan, Brookhaven National Laboratory, April 12th, 2006.
  15. *D-meson in a cold nuclear matter: a self-consistent coupled channels approach*, Tetsuro Mizutani, Virginia Tech, May 17th, 2006.
- 

## List of Particle Astrophysics Seminars for 2005-2006

1. *The Nature and Origin of Cosmic Rays or Tickling the Knee with CREAM*, Stéphane Coutu, Penn State University, November 8th 2005.
  2. *TRACER (Transition Radiation Array for Cosmic Energetic Radiation)*, Patrick (Jojo) Boyle, Kavli Institute for Cosmological Physics, University of Chicago, November 23rd 2005.
  3. *Neutrino Astronomy at the South Pole*, Andreas Gross, University of Dortmund, November 29th 2005.
  4. *Out of Africa: The latest results from the H.E.S.S. telescopes array*, Anthony M. Brown, Durham University, December 9th 2005.
- 

## List of special High Energy Physics Workshops at McGill University for 2005-2006

1. *Mini-Workshop on New Ideas in String Theory and Cosmology*, Outstanding problems at the interface of string theory and cosmology, and possible new directions, Keshav Dasgupta and Robert Brandenberger, January 27th and 28th, 2006.
2. *Experimental HEP Workshop*, Pierre Petroff, Laboratoire de l'Accélérateur Lineaire, Université de Paris-Sud,  
A - Basic Principles, March 27th, 2006.  
B - Signal processing (emphasis on the ATLAS and DZero calorimeters), March 27th, 2006.  
C - ATLAS and DZero calorimeters performance, March 28th, 2006.
3. *CALICE Collaboration Meeting*, organized by F. Corriveau, McGill University, May 10th to 12th, 2006.  
see [Web Page](#).
4. Colloque de physique subatomique dans le cadre du Congrès de l'Acfas 2006: *Unissons nos forces!* organized by F. Corriveau, McGill University, May 15th, 2006.  
see [Web Page](#).

