Philip David Mannheim – Recent Seminars

2000


4. Cosmic acceleration as the solution to the cosmological constant problem, seminar presented at Brandeis University, March, 2000.

5. How good is Newton’s law of gravity?, colloquium presented at University of Miami, April, 2000.

6. How we got into the dark matter fix and how we can get out, seminar presented at MIT, May, 2000.

7. Cosmic acceleration as the solution to the cosmological constant problem, seminar presented at Boston University, May, 2000.


15. Conformal gravity and a naturally small cosmological constant, poster presentation at 20th Texas Symposium on Relativistic Astrophysics, Austin, Texas, December 2000.
2001


4. How we got into the dark matter fix and how we can get out, colloquium presented at University of Texas, March, 2001.


2002

1. How recent is cosmic acceleration?, seminar presented at Yale University, April 2002.

2. How we got into the dark matter fix and how we can get out, seminar presented at University of St. Andrews, St. Andrews Scotland, August 2002.

3. How we got into the dark energy fix and how we can get out, seminar presented at University of St. Andrews, St. Andrews Scotland, August 2002.


5. The accelerating universe, colloquium presented at Daytona Beach Community College, Daytona, November 2002.

6. How we got into the dark matter fix and how we can get out, seminar presented at SLAC, Stanford University, December 2002.
7. Living with a large cosmological constant, seminar presented at SLAC, Stanford University, December 2002.


9. The accelerating universe, colloquium presented at San Francisco State University, December 2002.


2003


2. How we got into the dark matter fix and how we can get out, seminar presented at University of Florida, Gainesville, April 2003.

3. Living with a large cosmological constant, seminar presented at University of Florida, Gainesville, April 2003.

4. Living with a large cosmological constant, invited presentation at the 8th Wigner symposium, CUNY, New York City, May 2003.


2004

1. Dark matter and dark energy - fact or fantasy, seminar presented at University of Cardiff, Cardiff, Wales, January 2004.

2. Dark matter and dark energy - fact or fantasy, seminar presented at University of Bristol, Bristol, England, January 2004.

3. Dark matter and dark energy - fact or fantasy, colloquium presented at Louisiana State University, Baton Rouge, January 2004.
4.  The most expensive way to measure the velocity of sound, seminar presented at University of Connecticut, Storrs, February 2004.

5.  Dark matter and dark energy - fact or fantasy, invited seminar presented at MRST Conference, Montreal, Canada, May 2004.


2005


2.  Dark matter and dark energy – fact or fantasy, seminar presented at Rockefeller University, New York, May 2005.


4.  Alternatives to dark matter and dark energy, seminar presented at Kavli Institute, University of Chicago, October 2005.


7.  Dark matter and dark energy – fact or fiction, seminar presented at University of Toronto, Canada, November 2005.


2006


6. Dark matter and dark energy – fact or fiction, seminar presented at Syracuse University, May 2006.


14. Dark matter and dark energy – fact or fiction, seminar presented at McGill University, Montreal, November 2006.

15. Einstein’s incredible legacy, colloquium presented at Bishop’s University, Sherbrooke, Quebec, November 2006.


18. Introduction to the brane world, seminar presented at SUNY Stony Brook, December 2006.

19. Alternatives to dark matter and dark energy, seminar presented at SUNY Stony Brook, December 2006.


2007


4. Dark matter and dark energy – fact or fiction, colloquium presented at University of Kansas, October 2007.

5. Dark matter and dark energy – fact or fiction, seminar presented at University of Wisconsin, October 2007.


2008


5. Einstein’s incredible legacy, colloquium presented at Fresno State University, Fresno, California, March 2008.

6. Quantum Mechanics off the beaten track, colloquium presented at Washington University, St. Louis, April 2008.

7. Dark matter and dark energy – fact or fiction, colloquium presented at University of Nebraska, May 2008.


10. Does the cosmological constant problem presage a paradigm shift in gravitational theory?, invited talk at the Second Crisis in Cosmology Conference, Port Angeles, WA, September 2008.

11. Doing physics with non-diagonalizable Hamiltonians and the solution to the ghost problem in fourth-order derivative theories, seminar presented at Syracuse University, September 2008.


2009

1. Does the cosmological constant problem presage a paradigm shift in gravitational theory?, invited talk at Intertwining Theory and Observational Evidence in Contemporary Cosmology, Wuppertal Germany, February 2009.

2. Doing physics with non-diagonalizable Hamiltonians and the solution to the ghost problem in fourth-order derivative theories, invited talk presented at Quantum Mechanics in the Complex Domain, St. Louis, March 2009.

3. Doing physics with non-diagonalizable Hamiltonians and the solution to the ghost problem in fourth-order derivative theories, seminar at the University of Chicago, April 2009.

5. Quantum Gravity, colloquium at the University of Connecticut, October 2009.

6. Quantum Gravity – The Details, seminar at the University of Connecticut, October 2009.


2010

1. Quantum Conformal Gravity and Grandunification, seminar at Syracuse University, February 2010.

2. Comprehensive Solution to the Cosmological Constant, Zero-Point Energy, and Quantum Gravity Problems, seminar at Syracuse University, February 2010.

3. Comprehensive Solution to the Cosmological Constant, Zero-Point Energy, and Quantum Gravity Problems, seminar at University of Minnesota, February 2010.

4. Comprehensive Solution to the Cosmological Constant, Zero-Point Energy, and Quantum Gravity Problems, seminar at University of Wisconsin, February 2010.


9. Intrinsically Quantum-Mechanical Curvature and the Cosmological Constant Problem, seminar at Oxford University, June 2010.

10. Doing Physics with Non-Hermitian and Non-Diagonalizable Hamiltonians, seminar at Oxford University, June 2010.

11. Intrinsically Quantum-Mechanical Curvature and the Cosmological Constant Problem, seminar at Vanderbilt University, August 2010.

12. Impact of a Global Quadratic Potential on Galactic Rotation Curves, seminar at Vanderbilt University, August 2010.
13. Intrinsically Quantum-Mechanical Curvature and the Cosmological Constant Problem, invited talk presented at the International Conference on Two Cosmological Models, Universidad Iberoamericana, Mexico City, November 2010.


15. Intrinsically Quantum-Mechanical Curvature and the Cosmological Constant Problem, seminar at McGill University, November 2010.

16. Intrinsically Quantum-Mechanical Curvature and the Cosmological Constant Problem, seminar at Universite de Montreal, November 2010.

17. Alternatives to Dark Matter, colloquium at Universite de Montreal, November 2010.


2011


3. Why We Believe in Dark Matter and Dark Energy – and Do We Have To?, colloquium at Rutgers, October 2011.

4. Why We Believe in Dark Matter and Dark Energy – and Do We Have To?, colloquium at Wesleyan, November 2011.

5. The 2011 Nobel Prize in Physics, colloquium at University of Connecticut, Storrs, November 2011.


2012

1. Making the Case for Conformal Gravity, seminar at Perimeter Institute, Waterloo Canada, July 2012.

2. Making the Case for Conformal Gravity, seminar at University of Utrecht, Netherlands, August 2012.


4. Why We Believe in Dark Matter and Dark Energy – and Do We Have To?, colloquium at Concordia University, Montreal, November 2012.

5. Making the Case for Conformal Gravity, seminar at Universite de Montreal, November 2012.


7. PT Symmetry as a Necessary and Sufficient Condition for Unitary Time Evolution, invited talk at the Miami 2012 Conference, Fort Lauderdale, December 2012.

2013

1. Consistency of Conformal Gravity as a Microscopic Theory and its Implications for Gravity and Astrophysics as a Macroscopic One, seminar at Yale University April 2013.

2. Why there is a Cosmological Constant Problem, and what we can do about it, invited talk at Tales of Lambda Conference, Nottingham England, July 2013.

3. Why there is a Cosmological Constant Problem, and what we can do about it, seminar at Washington University, September 2013.


5. Why there is a Cosmological Constant Problem, and what we can do about it, seminar at Syracuse University, November 2013.

6. Why Gravity cannot be Quantized Canonically, and what we can do about it, invited talk at the Miami 2013 Conference, Fort Lauderdale, December 2013.
2014

1. The Crisis in Fundamental Physics, colloquium at the University of New Haven, May 2014.

2. Introduction to PT Symmetry, invited talk at the 9th Biennial Meeting of the International Association for Relativistic Dynamics, Storrs CT, June 2014.

3. Torsion: what it is and how to constrain it, invited talk at the 9th Biennial Meeting of the International Association for Relativistic Dynamics, Storrs CT, June 2014.


2015

1. Why physicists are interested in Differential Geometry, seminar at the University of Connecticut, Storrs, February, 2015.


3. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, seminar at Washington University, November 2015.

4. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, invited talk at the Miami 2015 Conference, Fort Lauderdale, December 2015.
2016
2. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, seminar at Imperial College London, May 2016.
3. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, seminar at King's College London, May 2016.
4. CPT Symmetry Without Hermiticity, invited talk at ICHEP2016, the 38th International Conference on High Energy Physics, Chicago, August 2016.

2017
2. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, seminar at Niels Bohr Institute, Copenhagen, May 2017.
3. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, seminar at the University of Liverpool, May 2017.
4. Living Without Supersymmetry – the Conformal Alternative and a Dynamical Higgs Boson, seminar at the University of Manchester, May 2017.
5. The Crisis in Fundamental Physics, SUNY Albany, September 2017.
6. Quantum Conformal Gravity, seminar at University of Utrecht, Netherlands, October 2017.
8. Quantum Conformal Gravity, seminar at Wien Technical University, Vienna, October 2017.
10. The 2017 Nobel Prize in Physics, Colloquium at the University of Connecticut Physics Department, November, 2017.

11. The 2017 Nobel Prize in Physics, colloquium at the University of Connecticut Mathematics Department, December, 2017.


2018

1. Quantum Conformal Gravity, seminar at the University of Cambridge, United Kingdom, June 7, 2018.

2. Quantum Conformal Gravity, seminar at Stanford University, Stanford Linear Accelerator Center Particle Theory Group, August 21, 2018.

3. Quantum Conformal Gravity, seminar at Chapman University Physics Department, August 30, 2018.

4. Why Physicists are Interested in Differential Geometry, seminar at Chapman University Mathematics Department, August 31, 2018.

5. Is Dark Matter Fact or Fantasy? – Clues From the Data, Stanford University, Stanford Linear Accelerator Center KAVLI Astrophysics Institute, September 7, 2018.

6. Quantum Conformal Gravity, seminar at Lawrence Berkeley Laboratory, University of California at Berkeley, September 12, 2018.

7. Quantum Conformal Gravity, seminar at University of California at Santa Cruz Center for Particle Theory, October 2, 2018.

8. Is the Cosmological Constant Problem Properly Posed?, seminar at Lawrence Berkeley Laboratory, University of California at Berkeley, October 3, 2018.

9. Quantum Conformal Gravity, seminar at Stanford University Physics Department, October 9, 2018.

10. Quantum Conformal Gravity, seminar at Washington University Physics Department, October 18, 2018.

11. Is Dark Matter Fact or Fantasy? – Clues From the Data, seminar at Washington University Physics Department, October 19, 2018.

12. Quantum Conformal Gravity, seminar at Johns Hopkins University Physics Department, November 5, 2018.


17. Quantum Conformal Gravity, seminar at University of Florida Physics Department, Gainesville, December 11, 2018.


19. Is Dark Matter Fact or Fantasy? – Clues From the Data, colloquium presented at University of Connecticut Department of Physics, Storrs, March 1, 2019.

2019

1. PT and CPT Symmetry as a Dynamics – Application to the Goldstone Theorem, seminar at King’s College London, United Kingdom, January 25, 2019.


3. Quantum Conformal Gravity, seminar at University of Massachusetts Physics Department, Amherst, February 22, 2019.

4. Is Dark Matter Fact or Fantasy? – Clues From the Data, colloquium presented at University of Connecticut Department of Physics, Storrs, March 1, 2019.