



The Abdus Salam
International Centre for Theoretical Physics



Summer School in Cosmology

Cosponsor(s): The Italian Institute for Nuclear Physics (INFN)
Organizer(s): P. Creminelli (ICTP) , U. Seljak (UC & LBNL Berkeley & Zürich U.), M. Viel (INAF, OATS)
Scientific Secretary: M. Musso (ICTP), A. Paranjape (ICTP)
Trieste - Italy, 19 - 30 July 2010

Venue: Leonardo da Vinci Building Main Lecture Hall

Programme

Monday, 19 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

19 July 2010

- 08:30 - 09:45** (Room: Leonardo da Vinci Building, Lobby)
--- REGISTRATION & ADMINISTRATIVE FORMALITIES ---
- 09:45 - 10:00** **WELCOME**
- 10:00 - 11:00** **J.A. Peacock / University of Edinburgh, U.K.**
Introduction to Cosmology - Lecture 1
- 11:00 - 11:45** (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---
- 11:45 - 12:45** **F. Pretorius / Princeton University, U.S.A.**
Gravitational Waves - Lecture 1
- 12:45 - 14:15** (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---
- 14:15 - 15:15** **U. Seljak / UC & LBNL Berkeley, U.S.A. & Zürich University, Switzerland**
Lensing - Lecture 1

15:15 - 16:15 **A.J. Tolley / Perimeter Institute, Canada**
Dark Energy - Lecture 1

16:15 - 16:45 --- Break ---

16:45 - 17:45 **Discussion Session**

Tuesday, 20 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

20 July 2010

09:30 - 10:30 **J.A. Peacock / University of Edinburgh, U.K.**
Introduction to Cosmology - Lecture 2

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **M. White / UC Berkeley, U.S.A.**
Large Scale Structure - Lecture 1

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **A.J. Tolley / Perimeter Institute, Canada**
Dark Energy - Lecture 2

14:45 - 15:45 **U. Seljak / UC & LBNL Berkeley, U.S.A. & Zürich University, Switzerland**
Lensing - Lecture 2

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Discussion Session**

Wednesday, 21 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

21 July 2010

09:30 - 10:30 **U. Seljak / UC & LBNL Berkeley, U.S.A. & Zürich University, Switzerland**
Lensing - Lecture 3

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **M. White / UC Berkeley, U.S.A.**
Large Scale Structure - Lecture 2

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **J.A. Peacock / University of Edinburgh, U.K.**
Introduction to Cosmology - Lecture 3

14:45 - 15:45 **F. Pretorius / Princeton University, U.S.A.**
Gravitational Waves - Lecture 2

15:45 - 16:15 --- Break ---

16:15 - 17:15 **J. Cohn / UC Berkeley, U.S.A.**
Clusters - Lecture 1

Thursday, 22 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

22 July 2010

09:30 - 10:30 **J.A. Peacock / University of Edinburgh, U.K.**
Introduction to Cosmology - Lecture 4

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **M. White / UC Berkeley, U.S.A.**
Large Scale Structure - Lecture 3

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **F. Pretorius / Princeton University, U.S.A.**
Gravitational Waves - Lecture 3

14:45 - 15:45 **A.J. Tolley / Perimeter Institute, Canada**
Dark Energy - Lecture 3

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Research Presentations by Participants**

Friday, 23 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

23 July 2010

09:30 - 10:30 **F. Pretorius / Princeton University, U.S.A.**
Gravitational Waves - Lecture 4

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **M. White / UC Berkeley, U.S.A.**
Large Scale Structure - Lecture 4

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **J. Cohn / UC Berkeley, U.S.A.**
Clusters - Lecture 2

14:45 - 15:45 **A.J. Tolley / Perimeter Institute, Canada**
Dark Energy - Lecture 4

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Discussion Session**

Monday, 26 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

26 July 2010

09:30 - 10:30 **G. Raffelt / Max Planck, Munich, Germany**
Neutrinos in Particle Physics, Astrophysics and Cosmology - Lecture 1

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **H.J. Mo / UMass, Amherst, U.S.A.**
Galaxy Formation - Lecture 1

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **D.D. Baumann / IAS, Princeton, U.S.A.**
Inflation - Lecture 1

14:45 - 15:45 **M. Zaldarriaga / IAS, Princeton, U.S.A.**
Cosmic Microwave Background - Lecture 1

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Research Presentations by Participants**

Tuesday, 27 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

27 July 2010

09:30 - 10:30 **G. Raffelt / Max Planck, Munich, Germany**
Neutrinos in Particle Physics, Astrophysics and Cosmology - Lecture 2

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **M. Zaldarriaga / IAS, Princeton, U.S.A.**
Cosmic Microwave Background - Lecture 2

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **G. Bertone / IAP Paris, France & Zurich University, Switzerland**
Dark Matter - Lecture 1

14:45 - 15:45 **M. Zaldarriaga / IAS, Princeton, U.S.A.**
Cosmic Microwave Background - Lecture 3

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Discussion Session**

Wednesday, 28 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

28 July 2010

09:30 - 10:30 **G. Bertone / IAP Paris, France & Zurich University, Switzerland**
Dark Matter - Lecture 2

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **M. Zaldarriaga / IAS, Princeton, U.S.A.**
Cosmic Microwave Background - Lecture 4

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **D.D. Baumann / IAS, Princeton, U.S.A.**
Inflation - Lecture 2

14:45 - 15:45 **H.J. Mo / UMass, Amherst, U.S.A.**
Galaxy Formation - Lecture 2

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Discussion Session**

Thursday, 29 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

29 July 2010

09:30 - 10:30 **H.J. Mo / UMass, Amherst, U.S.A.**
Galaxy Formation - Lecture 3

10:30 - 11:15 (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---

11:15 - 12:15 **G. Bertone / IAP Paris, France & Zurich University, Switzerland**
Dark Matter - Lecture 3

12:15 - 13:45 (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---

13:45 - 14:45 **G. Raffelt / Max Planck, Munich, Germany**
Neutrinos in Particle Physics, Astrophysics and Cosmology - Lecture 3

14:45 - 15:45 **D.D. Baumann / IAS, Princeton, U.S.A.**
Inflation - Lecture 3

15:45 - 16:15 --- Break ---

16:15 - 17:15 **Research Presentations by Participants**

Friday, 30 July 2010 (Room:Leonardo da Vinci Building Main Lecture Hall)

30 July 2010

- 09:00 - 10:00** **G. Bertone** / *IAP Paris, France & Zurich University, Switzerland*
Dark Matter - Lecture 4
- 10:00 - 10:30** (Room: Leonardo da Vinci Building Terrace)
--- Coffee Break ---
- 10:30 - 11:30** **G. Raffelt** / *Max Planck, Munich, Germany*
Neutrinos in Particle Physics, Astrophysics and Cosmology - Lecture 4
- 11:30 - 12:30** **D.D. Baumann** / *IAS, Princeton, U.S.A.*
Inflation - Lecture 4
- 12:30 - 14:00** (Room: Leonardo da Vinci Building Cafeteria)
--- Lunch Break ---
- 14:00 - 15:00** **H.J. Mo** / *UMass, Amherst, U.S.A.*
Galaxy Formation - Lecture 4