# Summer school: Les Houches on Dark Universe

# **Report of Contributions**

Long lecture 1

Contribution ID: 2 Type: not specified

# Long lecture 1

Monday, July 7, 2025 4:00 PM (1h 30m)

Presenter: FERREIRA, Pedro

Session Classification: Lecture: The standard model of cosmology: a critique of its sta-

tus

Contribution ID: 3 Type: not specified

## **Long lecture 2**

Monday, July 7, 2025 6:00 PM (1h 30m)

Presenter: FERREIRA, Pedro

Session Classification: Lecture: The standard model of cosmology: a critique of its sta-

tus

Contribution ID: 4 Type: **not specified** 

# **Long lecture 3**

Tuesday, July 8, 2025 9:00 AM (1h 30m)

Presenter: FERREIRA, Pedro

Session Classification: Lecture: The standard model of cosmology: a critique of its sta-

tus

Long lecture 4

Contribution ID: 5 Type: **not specified** 

## **Long lecture 4**

Tuesday, July 8, 2025 2:00 PM (1h 30m)

**Presenter:** FERREIRA, Pedro

Session Classification: Lecture: The standard model of cosmology: a critique of its sta-

tus

Contribution ID: 6 Type: not specified

# Long lecture 1

Tuesday, July 8, 2025 11:00 AM (1h 30m)

Presenter: BURGESS, Cliff

Session Classification: Lecture: Dark energy-vs-high energy physics

Contribution ID: 7 Type: **not specified** 

# **Long lecture 2**

Tuesday, July 8, 2025 4:00 PM (1h 30m)

Presenter: BURGESS, Cliff

Session Classification: Lecture: Dark energy-vs-high energy physics

Contribution ID: 8 Type: not specified

## **Long lecture 3**

Wednesday, July 9, 2025 11:00 AM (1h 30m)

Presenter: BURGESS, Cliff

Session Classification: Lecture: Dark energy-vs-high energy physics

Long lecture 4

Contribution ID: 9 Type: not specified

# **Long lecture 4**

Thursday, July 10, 2025 11:00 AM (1h 30m)

Presenter: BURGESS, Cliff

Session Classification: Lecture: Dark energy-vs-high energy physics

Contribution ID: 10 Type: not specified

# Long lecture 1

Thursday, July 10, 2025 2:00 PM (1h 30m)

**Presenter:** SEMELIN, Benoit

**Session Classification:** Lecture: Physics of the dark ages

Contribution ID: 11 Type: not specified

# **Long lecture 2**

Friday, July 11, 2025 9:00 AM (1h 30m)

**Presenter:** SEMELIN, Benoit

**Session Classification:** Lecture: Physics of the dark ages

Contribution ID: 12 Type: not specified

# **Long lecture 3**

Monday, July 14, 2025 9:00 AM (1h 30m)

**Presenter:** SEMELIN, Benoit

**Session Classification:** Lecture: Physics of the dark ages

Short lecture

Contribution ID: 13 Type: not specified

#### **Short lecture**

Friday, July 11, 2025 11:00 AM (1h 30m)

**Presenter:** AUBERT, Dominique

**Session Classification:** Lecture: Physics of the dark ages

Contribution ID: 14 Type: not specified

# Long lecture 1

Monday, July 21, 2025 9:00 AM (1h 30m)

Presenter: LESGOURGUES, Julien

Session Classification: Lecture: Advanced CMB physics

Contribution ID: 15 Type: not specified

# **Long lecture 2**

Tuesday, July 22, 2025 9:00 AM (1h 30m)

Presenter: LESGOURGUES, Julien

Session Classification: Lecture: Advanced CMB physics

Contribution ID: 16 Type: not specified

## **Long lecture 3**

Wednesday, July 23, 2025 9:00 AM (1h 30m)

Presenter: LESGOURGUES, Julien

Session Classification: Lecture: Advanced CMB physics

Long lecture 4

Contribution ID: 17 Type: not specified

# **Long lecture 4**

Thursday, July 24, 2025 9:00 AM (1h 30m)

Presenter: LESGOURGUES, Julien

Session Classification: Lecture: Advanced CMB physics

Contribution ID: 18 Type: not specified

## **Long lecture 5**

Friday, July 25, 2025 9:00 AM (1h 30m)

Presenter: LESGOURGUES, Julien

Session Classification: Lecture: Advanced CMB physics

Long lecture 1

Contribution ID: 19 Type: not specified

## Long lecture 1

Monday, July 21, 2025 11:00 AM (1h 30m)

Presenter: UHLEMANN, Cora

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 20 Type: not specified

## **Long lecture 2**

Tuesday, July 22, 2025 11:00 AM (1h 30m)

Presenter: UHLEMANN, Cora

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 21 Type: not specified

## **Long lecture 3**

Wednesday, July 23, 2025 11:00 AM (1h 30m)

Presenter: UHLEMANN, Cora

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 22 Type: not specified

## **Long lecture 4**

Thursday, July 24, 2025 11:00 AM (1h 30m)

Presenter: UHLEMANN, Cora

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 23 Type: not specified

#### **Short course**

Tuesday, July 22, 2025 2:00 PM (1h 30m)

**Presenter:** GALLI, Silvia (IAP)

Session Classification: Lecture: Advanced CMB physics

Contribution ID: 24 Type: not specified

#### **Short course**

Wednesday, July 23, 2025 2:00 PM (1h 30m)

**Presenter:** PITROU, Cyril

Session Classification: Lecture: Advanced CMB physics

Contribution ID: 25 Type: not specified

#### **Short course**

Thursday, July 24, 2025 2:00 PM (1h 30m)

**Presenter:** LAIGLE, Clotilde

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 26 Type: not specified

#### **Short course**

Friday, July 25, 2025 2:00 PM (1h 30m)

**Presenter:** KRAUSE, Elisabeth

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 27 Type: not specified

# Long lecture 1

Monday, July 28, 2025 9:00 AM (1h 30m)

Presenter: POULIN, Vivian

Session Classification: Lecture: Standard model tensions

Contribution ID: 28 Type: not specified

# **Long lecture 2**

Tuesday, July 29, 2025 2:00 PM (1h 30m)

Presenter: POULIN, Vivian

Session Classification: Lecture: Standard model tensions

Contribution ID: 29 Type: not specified

# Long lecture 1

Monday, July 28, 2025 2:00 PM (1h 30m)

Presenter: DI VALENTINO, Eleonora

Session Classification: Lecture: Standard model tensions

Contribution ID: 30 Type: not specified

# **Long lecture 2**

Tuesday, July 29, 2025 9:00 AM (1h 30m)

Presenter: DI VALENTINO, Eleonora

Session Classification: Lecture: Standard model tensions

Short course

Contribution ID: 31 Type: not specified

#### **Short course**

Monday, July 28, 2025 11:00 AM (1h 30m)

Presenter: MORADINZEHAD, Azadeh

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 32 Type: not specified

#### **Short course**

Tuesday, July 29, 2025 11:00 AM (1h 30m)

**Presenter:** LECLERCQ, Florent (Institut d'Astrophysique de Paris)

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 33 Type: not specified

#### **Short course**

Wednesday, July 30, 2025 11:00 AM (1h 30m)

**Presenter:** LANUSSE, Francois (CNRS)

Session Classification: Lecture: Large scale structures of the universe: physics, phenomenol-

ogy, statistics

Contribution ID: 34 Type: not specified

## Long lecture 1

Wednesday, July 30, 2025 9:00 AM (1h 30m)

**Presenter:** VAN WAERBEKE, Ludovic

**Session Classification:** Lecture: Dark matter alternatives

Contribution ID: 35 Type: not specified

# **Long lecture 2**

Thursday, July 31, 2025 9:00 AM (1h 30m)

**Presenter:** VAN WAERBEKE, Ludovic

**Session Classification:** Lecture: Dark matter alternatives

Contribution ID: 36 Type: not specified

#### **Short course**

Thursday, July 31, 2025 11:00 AM (1h 30m)

**Presenter:** FAMAEY, Benoit

**Session Classification:** Lecture: Dark matter alternatives

Short course

Contribution ID: 37 Type: not specified

#### **Short course**

Wednesday, July 30, 2025 2:00 PM (1h 30m)

**Presenter:** ARMENGAUD, Eric

**Session Classification:** Lecture: Dark matter alternatives

Short course

Contribution ID: 38 Type: not specified

#### **Short course**

Thursday, July 31, 2025 2:00 PM (1h 30m)

Presenter: CORREA, Camila

**Session Classification:** Lecture: Dark matter alternatives

Contribution ID: 39 Type: not specified

#### **Short course**

Monday, July 21, 2025 2:00 PM (1h 30m)

Presenter: AGHANIM, Nabila

Session Classification: Lecture: Advanced CMB physics

Contribution ID: 40 Type: not specified

# Long lecture 1

Tuesday, July 15, 2025 9:00 AM (1h 30m)

Presenter: TEYSSIER, Romain

Session Classification: Lecture: Numerical cosmology

Contribution ID: 41 Type: not specified

## Long lecture 2

Wednesday, July 16, 2025 9:00 AM (1h 30m)

Presenter: TEYSSIER, Romain

Session Classification: Lecture: Numerical cosmology

Contribution ID: 42 Type: not specified

# Long lecture 3

Thursday, July 17, 2025 9:00 AM (1h 30m)

Presenter: TEYSSIER, Romain

Session Classification: Lecture: Numerical cosmology

Contribution ID: 43 Type: not specified

# **Long lecture 4**

Friday, July 18, 2025 9:00 AM (1h 30m)

Presenter: TEYSSIER, Romain

Session Classification: Lecture: Numerical cosmology

Contribution ID: 44 Type: **not specified** 

### **Short lecture**

Wednesday, July 16, 2025 2:00 PM (1h 30m)

**Presenter:** HAHN, Oliver

Session Classification: Lecture: Numerical cosmology

Short lecture

Contribution ID: 45 Type: not specified

### **Short lecture**

Thursday, July 17, 2025 2:00 PM (1h 30m)

Presenter: KRALJIC, Katarina

Session Classification: Lecture: Numerical cosmology

Short lecture

Contribution ID: 46 Type: not specified

#### **Short lecture**

Friday, July 18, 2025 2:00 PM (1h 30m)

Presenter: ANGULO, Raul

Session Classification: Lecture: Numerical cosmology

Contribution ID: 47 Type: **not specified** 

#### **Short lecture**

Thursday, July 10, 2025 9:00 AM (1h 30m)

**Presenter:** FLEURY, Pierre

Session Classification: Lecture: The standard model of cosmology: a critique of its sta-

tus

Long lecture 1

Contribution ID: 48 Type: not specified

# Long lecture 1

Monday, July 14, 2025 11:00 AM (1h 30m)

**Presenter:** STEER, Daniele

Session Classification: Lecture: Gravitational Waves for Cosmology

Contribution ID: 49 Type: not specified

### **Short lecture**

Monday, July 14, 2025 2:00 PM (1h 30m)

**Presenter:** DOUSPIS, Marian (IAS)

**Session Classification:** Lecture: Physics of the dark ages

Contribution ID: 50 Type: not specified

# **Long lecture 2**

Tuesday, July 15, 2025 11:00 AM (1h 30m)

**Presenter:** STEER, Daniele

Session Classification: Lecture: Gravitational Waves for Cosmology

Contribution ID: 51 Type: not specified

### **Short lecture**

Wednesday, July 16, 2025 11:00 AM (1h 30m)

Presenter: TAMANINI, Nicola

Session Classification: Lecture: Gravitational Waves for Cosmology

Contribution ID: 52 Type: not specified

### **Short lecture**

Thursday, July 17, 2025 11:00 AM (1h 30m)

**Presenter:** REGIMBAU, Tania

Session Classification: Lecture: Gravitational Waves for Cosmology

Contribution ID: 53 Type: not specified

## **Short lecture**

Friday, July 18, 2025 11:00 AM (1h 30m)

Presenter: CAPRINI, Chiara

Session Classification: Lecture: Gravitational Waves for Cosmology