

# Scientific programme

## Monday 30 May

9.20 Coffee and refreshments

10.00 Welcome - A Roadmap to the workshop

12.30 Lunch

## Tuesday 31 May (chair: Rouzbeh Allahverdi)

9.00 Coffee and refreshments

10.00 Morning Talks

- Mar Bastero Gil, *Little Warm Inflation*
- Carlos Tamarit, *Higgs portal coupling and Inflation*

12.30 Lunch

14.30 Discussion led by the chair.

## Wednesday 1 June (chair: Zurab Tavartkiladze)

9.00 Coffee and refreshments

10.00 Morning Talks

- George Leontaris, *F-theory models and their predictions for new physics phenomena*
- Coffee
- Borut Bajc, *Residual Symmetries in  $SO(10)$  models*

12.30 Lunch

14.30 Afternoon talk

- Sofiane Boucenna, *Some cosmological aspects of  $SO(10)$  GUT's*

**15.30** Discussion led by the chair.

## **Thursday 2 June (chair: Mar Bastero-Gil)**

**9.00** Coffee and refreshments

### **10.00 Morning Talks**

- Laura Covi, *Baryogenesis with R-parity violation*
- Coffee
- Hooman Davoudiasl, *Exo-Higgs at 750 GeV and the Genesis of Baryons*

**12.30** Lunch

### **14.30 Afternoon talk:**

- Stefan Antusch, *Particle physics models of inflation and reheating*

**15.30** Discussion led by the chair

## **Friday 3 June (chair: Danny Marfatia)**

**9.00** Coffee and refreshments

### **10.00 Morning Talks**

- Bhupal Dev, *Flavour-covariant approach to leptogenesis*
- Coffee
- Zurab Tavartkiladze, *Predicting Leptonic CP Violation and Leptogenesis*

**12.30** Lunch

### **14.30 Afternoon talk**

- Urjit Yajnik, *Right handed symmetry at a low scale*

**14.30** Discussion led by the chair

**WEEKEND**

## Monday 6 June (chair: Fedor Bezrukov)

9.00 Coffee and refreshments

### 10.00 Morning Talks

- Anupam Mazumdar, *UV completion of Higgs inflation*
- Coffee
- Koushik Dutta, *Moduli Vacuum Misalignment and Precise Predictions in String Inflation*

### 12.30 Lunch

### 14.30 Afternoon talk

- Guillermo Ballesteros, *Solving five problems of particle physics and cosmology in one stroke*

15.30 Discussion led by the chair.

## Tuesday 7 June (chair: Borut Bajc)

9.00 Coffee and refreshments

### 10.00 Morning Talks

- Fedor Bezrukov, *SM vacuum stability and the early Universe*
- Coffee
- Rouzbeh Allahverdi, *Non-thermal WIMPs: Opportunities and Challenges*

### 12.30 Lunch

### 14.30 Afternoon talk

- Seng Pei Liew, *Bound state effects on dark matter phenomenology: from the early universe to the LHC*

**15.30** Discussion led by the chair.

## Wednesday 8 June (chair: Rouzbeh Allahverdi)

9.00 Coffee and refreshments

### 10.00 Morning Talks

- Alex Merle, *Models of sterile neutrinos*
- Coffee
- Kevork Abazajian, *Implication of the candidate detection of DM in the X-ray*

### 12.30 Lunch

## WORKSHOP ON: 'BEYOND THE WIMP PARADIGM'

**Chair:** Rouzbeh Allahverdi

14.30 Marco Drewes, *Sterile Neutrinos*

15.00 Angnis Schmidt-May, *Gravitational Origin of Dark Matter*

### 15.30 Coffee break

16.15 Stefano Morisi, *Dark matter scenarios @ IceCube*

16.45 Masaki Asano, *Is DM elementary composite or partially composite?*

## Thursday 9 June (chair: TBA)

9.00 Coffee and refreshments

### 10.00 Morning Talks

- Nobuchika Okada,  $Z'_{BL}$  portal dark matter and LHC Run-2 results
- Coffee
- Debasish Borah, *Radiative neutrino mass with eV-keV scale sterile neutrino and a stable cold dark matter candidate*

### 12.30 Lunch

### 14.30 Afternoon talk

- Ayuki Kamada, *Gravitational lenses as a probe of dark matter models*

15.30 Discussion led by the chair.

16.30 Coffee

17.00 Apostolos Pilaftsis, *TBA* (chair: Fedor Bezrukov)

## Friday 10 June (chair: Steve King)

9.00 Coffee and refreshments

### 10.00 Morning Talks

- Danny Marfatia, *Impact of nonstandard interactions on sterile neutrino searches at IceCube*
- Coffee
- Zhi-zhong Xing, *Terrestrial matter effects in low-energy (anti)neutrino oscillations*

### 12.30 Lunch

### 14.30 Afternoon talk

- Zhou, *Relic RH Dirac  $\nu$  and  $C\nu B$*

**15.30** Discussion led by chair and final remarks.