

**The International course of lectures by  
Prof.Dr. Maxim Yu. Khlopov, Prof. Dmitri Semikoz  
and  
Prof. Martin Bucher**

6 February

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 1. M. Khlopov

"Frontiers of particle physics"

13 February

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 2. M. Khlopov

"Inflation, baryosynthesis, dark matter and BSM physics"

20 February

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 3. M. Khlopov

"Cosmoarcheology (cosmological probes for particle physics)"

27 February

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 4. M. Khlopov

"Cosmophenomenology of new physics"

6 March

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 5. D.Semikoz

"Cosmic rays"

13 March

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 6. D.Semikoz

"Gamma-ray astronomy"

20 March

14.15-16.40 Paris time (16.15-18.40 MT)

Lecture 7. D.Semikoz

"Neutrino Astrophysics"

27 March

15.15-17.40 Paris time (16.15-18.40 MT)

Lecture 8. M. Khlopov

"Dark matter searches"

3 April

15.15-17.40 Paris time (16.15-18.40 MT)

Lecture 9. M. Khlopov

"Dark atoms"

10 April

15.15-17.40 Paris time (16.15-18.40 MT)

Lecture 10. M. Khlopov

"Brane world cosmology"

17 April

15.15-17.40 Paris time (16.15-18.40 MT)

Lecture 11. M. Khlopov

"Cosmoparticle physics - the fundamental relationship of cosmology and particle physics "

15 May

15.15-17.40 Paris time (16.15-18.40 MT)

Lecture 12. M. Bucher (APC, France)

"CMB probes for cosmology and particle physics"

Owing to the interactive character of this course additional lectures and individual consultations are possible

To be admitted to exam the participants should be registered on VIA Forum and must put the topic

and then versions of their small thesis, being corrected following professor's comments, as posts

in the current directory Education, in which records of the lectures of the course will be also put.

The estimation of such thesis determines 70% of the final mark.

The lectures and exam proceed online in the form of videoconference with the use of adobe Connect system.

To enter the virtual lecture room it is sufficient to click "to participate" on any announcement of VIA lecture on the homepage

<http://viavca.in2p3.fr/site.html>

and then

Enter as Guest - print your name.

You are welcome to join us in this exciting educational experiment