



PONT d'Avignon 2014

Progress on Old and New Themes in Cosmology

3rd Edition in the PONT series



Welcome!

IPhT
Institut de Physique Théorique
CEA/Saclay

IFA
Institut de Física d'Altes Energies
Barcelona

Organizing Committee:
Philippe Brax,
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Géraldine Servant

The Universe...

Monday 14 April 2014

1-Inflation and CMB - Chambre du Trésorier (09:00-12:30)

time	title	presenter
09:00	Planck 2013 cosmology results	CHALLINOR, Anthony
09:45	Inflation after BICEP2	BAUMANN, Daniel
10:30	Coffee Break	
11:00	Testing inflation after Planck	Dr. RINGEVAL, christophe
11:45	What is left of non-Gaussianity?	WANDS, David

1-Inflation and CMB: 1-Inflation and CMB - Chambre du Trésorier (14:30-15:15)

time	title	presenter
14:30	The stability of the electroweak vacuum	ESPINOSA, Jose

Afternoon session - Chambre du Trésorier (15:15-18:15)

time	title	presenter
15:15	Closing in on Axion Dark Matter	REDONDO, Javier
15:45	UV-completing Ghost Inflation	SIBIRSKY, Sergey
16:05	The full CMB temperature bispectrum from single-field inflation	Dr. VERINZZI, Filippo
16:25	Coffee Break	
16:55	Minimal models for inflation	BEZUKOV, Fedor
17:15	Non-gaussian imprints of primordial magnetic fields from inflation	JAIN, Rajeev Kumar
17:35	Searching for primordial correlations between the magnetic field and the density perturbation using ν_{iso} -distortion	Mr. GANC, Jonathan
17:55	A new consequence of Inflation: Imprinting the Standard Model in the sky	FIGUEROA, daniel

Round Table Discussion on Inflation and BICEP2 - Chambre du Trésorier (18:20-19:20)

- Co-moderators: BAUMANN, Daniel; Challinor, Anthony; Peris, Iñaki; RINGEVAL, Christophe; Serfaty, Laurence; Wands, David

Tuesday 15 April 2014

2-Astroparticle - Chambre du Trésorier (09:00-12:45)

time	title	presenter
09:00	Leptogenesis: status and recent progress	LAVIGNAC, Stéphane
09:45	Dark Radiation	PERIS, Iñaki
10:30	Coffee Break	
11:00	Cosmological magnetic fields	NERONOV, Andrei
11:45	Baryogenesis and the EW Phase Transition: some new developments and old connections	Prof. KANULAINEN, Kimmo
12:15	Dark forces and new physics at the intensity frontier	POPELOV, Maxim

Afternoon session - Chambre du Trésorier (14:30-18:30)

time	title	presenter
14:30	Galaxy science and status - and an update on ultra-faint feedback	GILMORE, Gerry
15:00	Primordial black holes as dark matter candidates: closing the remaining mass window	TINYANOV, Peter
15:20	Dark Matter Interpretations of Extended Gamma Ray Emission towards the Galactic Center	Dr. HORUCHI, Shunsaku
15:40	Internal bremsstrahlung signatures of Dark Matter annihilations in light of direct detection and collider searches	GARNY, Mathias
16:00	Recent results from the LUX dark matter search	FIORUCCI, Simon
16:20	Coffee Break	
16:50	Indirect Search for Dark Matter with the ANTARES Neutrino Telescope	BERTIN, Vincent
17:10	Probing Nu-Forces at IceCube	SHEEMAKER, Ian
17:30	Anti-nuclei from Dark Matter	VITTI, Andrea
17:50	Search for Ultra-high energy neutrinos at the Pierre Auger Observatory	SALAMIDA, Francesco
18:10	Higher order dark matter annihilations in the Sun and implications for IceCube	TOTZAUER, Maximilian
18:20	Dark matter annihilations and decays after the AMS-02 positron measurements	LAMPERTORFER, Anna

Wednesday 16 April 2014

4-Dark Matter - Chambre du Trésorier (09:00-12:30)

time	title	presenter
09:00	Indirect detection of dark matter	CONRAD, Jan
09:45	A Brief Overview of Direct Searches for Dark Matter	COOLEY, Jodi
10:30	Coffee Break	
11:00	Clues to the identity of the dark matter from simulations and observations	FRENK, Carlos
11:45	A WIMP? dark matter particle around the corner?	HAMEY, Thomas

Afternoon session - Chambre du Trésorier (14:30-18:30)

time	title	presenter
14:30	Non-local gravity and dark energy	MAGGIORE, Michele
15:00	Dark Energy phenomenology: the effective field theory approach	Dr. PIAZZA, Federico
15:30	On the non-linear scale of cosmological perturbation theory	KONSTANTIN, Thomas
16:00	Large-scale structures in some modified-gravity scenarios	VALAGEAS, Patrick
16:20	Coffee Break	
16:50	Cosmological constraints on Lorentz Invariance of the Universe	IVANOV, Mikhail
17:10	Dark D-brane Cosmology	KOIVISTO, Tomi
17:30	Consistency relations for large scale structure	GLENN, Jérôme
17:40	Backreaction in Swiss Cheese models	LAVINIO, Mikko
17:50	Beyond single stream: with the Schrödinger method	Mrs. UHLEMANN, Cora
18:00	Probing non-standard gravity with the growth index of cosmological perturbations	Mr. STEIGERWALD, Heinrich
18:10	Probing the power spectrum of matter with the galaxy clustering ratio	SEL, Julien
18:20	A new approach to chameleon theories	Dr. KRAUSEBURD, Lucile

Thursday 17 April 2014

5-Gravity and modified gravity - Chambre du Trésorier (09:00-12:30)

time	title	presenter
09:00	Massive gravity and cosmology	MUKOHYAMA, Shinji
09:45	Testing General Relativity with Cosmology	Prof. FERREIRA, Pedro G.
10:30	Coffee Break	
11:00	Modified Gravity at Crossroad	Dr. LI, Baojiu
11:45	Gravitational wave standard sirens and cosmology	SATHYAPRAKASH, Bangalore

Afternoon session - Chambre du Trésorier (14:30-18:30)

time	title	presenter
14:30	Massive black holes and galaxy formation: state of the art and implications in cosmology	VOLONTIERI, Marta
15:00	Supermassive black holes, gravitational waves and cosmology	Dr. SESANA, Alberto
15:30	Cosmology with the 21 cm line	MAO, Yi
16:00	Measuring relativistic effects with anti-symmetric galaxy correlations	BOUVIN, Camille
16:20	Coffee Break	
16:50	Dark Energy using wide field imagers	EALET, Anne
17:10	Cosmic variance on the local expansion rate	VALKENBURG, Wessel
17:30	Cosmology with photometric quasars	Mr. LEISTEDT, Boris
17:50	Dark Energy Survey: Status Report and Early Cluster Science	EVHARD, August
18:10	Probing beyond standard model physics via Hawking radiated gravitational waves	Mr. FUJITA, Tomohiro

Friday 18 April 2014

3-Observational Cosmology - Chambre du Trésorier (09:00-12:30)

time	title	presenter
09:00	Cosmology with type-Ia Supernovae	BETOULE, Marc
09:45	Cosmology with the Euclid satellite	PETTORINO, Valeria
10:30	Coffee Break	
11:00	LSS and BAO: current status and prospects	Dr. REID, Beth
11:45	Cosmic Acceleration Then and Now	FRIEMAN, Josh

 Upload your talk on the INDICO!
(come see us if you have troubles)

... and everything else

- **Welcome cocktail *monday* at 19h20**

(Salle des Gardes, Palais des Papes)

- **Banquet on *Thursday* at 8pm**

- **Discounted *tickets* to visit the *Palais*:**

*show your conference badge at the entrance
for a (small) reduction*

Opening hours: 9 am - 7 pm

Banquet



Palais

**Meet in front
of Centre des
Congrès at
19h30**

If locked out:

+33 6 26 88 12 67

+33 6 | 9 38 43 07

More practical info

- **Rooms open: 8:30-13:00 14:15-end of session**
Locked during lunch break (you can leave bags here)
- **Wireless: AvignonCongresN**
(no password needed)
- **Red badge = help**



More practical info

- Small chambers are at your disposal (for secret conclaves)

Studium



Salle des Gardes



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- **Speakers** (especially afternoon):
please upload your talk
(or come see us during the breaks)





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Enjoy!