

Preface: IF+YITP GR+HEP+Cosmo International Symposium VI

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INTRODUCTION

The Institute for Fundamental Study (IF) hosted the 6th IF+YITP International Symposium on superstring theory, the quantum theory of fields, gravity, cosmology, and related topics, on August 3rd through 5th, 2016, on the campus of Naresuan University, Thailand. This version of the symposium was co-sponsored by the Yukawa Institute for Theoretical Physics (YITP). These symposia have two principle aims. First, to bring together researchers from Thailand and around the world to discuss new ideas in fundamental physics. Second, these meetings are to support the recently established Institute for Fundamental Study (The Tah Poe Academia



Institute) centered in Naresuan University in Phitsanulok, Thailand. The 6th symposium was a great success in terms of these two goals. The meeting had eight invited speakers and over 60 participants from both inside and outside Thailand. A host of new models and theories were presented at this symposium which covered a wide range of theoretical topics from cosmology to quantum field theory to superstring theory. The list of invited speakers and their talk titles is given below.

- Alexei A. Starobinsky (Landau Inst., Russia): “Inflaton potential: smooth global reconstruction and fine features”
- Chethan Krishnan (Indian Inst. Sci., India): “Neumann gravity” and “Higher gravity”
- Edouard B. Manoukian (IF, Thailand): “Developments of Some Fundamental Problems in Quantum Field Theory and Quantum Physics”
- Feng-Li Lin (National Taiwan Normal U): “Relative entropy and torsion coupling” and “Anti-Unruh phenomena in the open dynamics of Majorana zero modes”
- Kazuki Hasebe (Sendai National College of Technology, Japan): “Nambu geometry in quantum Hall effect and topological insulators”
- Misao Sasaki (YITP): “Inflationary Magnetogenesis with Broken Local U(1) Symmetry”
- Seiji Terashima (YITP): “Exact Path Integral for 3D Quantum Gravity”
- Shinji Mukohyama (YITP): “Is DBI as fragile as other k-essence fields? and “Ghost condensation and horizon entropy”

A more complete list of participants as well as a schedule of talks can be found at <http://www.if.nu.ac.th/node/1407>

and

http://www.if.nu.ac.th/sites/default/files/bin/talk_schedule13.pdf respectively.

The general conference website is

http://www.if.nu.ac.th/IF_YITP_GR_HEP_Cosmo_International_Symposium_VI .

COMMITTEES

The various committees who helped with the scientific and logistical organization of this meeting were

- **International Advisory Committee**
Emil T. Akhmedov (ITEP)
Misao Sasaki (YITP)
Douglas Singleton (California State U)
Shinji Tsujikawa (Tokyo University of Science)
- **Scientific Organizing Committee**
Antonio De Felice (YITP)
Burin Gumjudpai (IF, Naresuan U)
Edouard B. Manoukian (IF, Naresuan U)
Seckson Sukhasena (IF, Naresuan U)
- **Local Organizers** Shingo Takeuchi (IF, Naresuan U)
Matthew J. Lake (IF, Naresuan U)

LIST OF PARTICIPANTS

Alexei A. Starobinsky (Russia): Landau Inst. (Russia)
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Acknowledgments

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