

2020 Summer School on Cosmology and Particle Physics (Online)

Monday, 10 August 2020 - Friday, 14 August 2020

CTPU PTC

Scientific Programme

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5. Beyond the Standard Model & Higgs inflation

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1. PDG, <http://pdg.lbl.gov/>

2. Michael Peskin, [Concepts of Elementary Particle Physics]

3. Mathew D. Schwartz, [Quantum field theory and the Standard Model]

4. Bezrukov and Shaposhnikov, [The Standard Model Higgs boson as the inflation] <https://arxiv.org/abs/0710.3755>

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□□: □□□ □□□ □□. Peskin & Schroder (1995)□ 3□(The Dirac field), 15□(Non-Abelian Gauge invariance), 19□(Perturbation Theory Anomalies), 20□(Gauge Theories with Spontaneous Symmetry Breaking)□ □□□ □□□ □□□□ □□.

2. Kaluza-Klein(KK) □□□ □□□(SUSY)

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□□: Wess & Bagger (1992) 1,2□

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□□: Greene, Elegant Universe (1999) (3,4,5□□ □□□□ □□□ □□□□□ □□□□), Becker, Becker & Schwarz (2007) 2□, 4□

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□□: Becker, Becker & Schwarz (2007) 7□, 9□

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□□: Becker, Becker & Schwarz (2007) 6□

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1. Λ CDM model

What is the Λ CDM model?

[Lambda-CDM model](#)

2. Dark matter and dark energy

What is dark matter, dark energy, neutrinos, and photons?

2-3 What is the 2015 Nobel Prize in Physics awarded to for their discovery of dark energy?

[2015 Nobel Prize in Physics](#)

What is the **2-3** Nobel Prize in Physics awarded to for their discovery of dark energy?

What is the Nobel Prize in Physics awarded to for their discovery of dark energy?

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4. Dark matter and dark energy

What is the dark matter and dark energy?

What is the dark matter and dark energy?

<http://pkas.kas.org/journal/article.php?code=72875&list.php?m=1>

What is the dark matter and dark energy?

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<u><https://www.phys.sinica.edu.tw/~gwc19/index.php?page=program></u>

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<u><http://webzine.kps.or.kr/contents/data/webzine/webzine/14762088145.pdf></u>

<u><https://arxiv.org/abs/1206.6297></u>

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