Opening Address HPNP2013 Higgs as a Probe of New Physics 2013

S. KANEMURA (University of Toyama) On behalf of HPNP2013 Organizing Committee

Local Organizers: T. Shindou, M. Kakizaki, H. Sugiyama, H. Yokoya

- Toyama is at Centre of Japan!
- Toyama (富山Rich Mountains)
- High Mountains (Japan Alps)
- Much Snow
- Nice Fresh Fishes
- Univ. of Toyama
 Nearest Univ. to Kamioka



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Motivation to HPNP2013

4th July 2012: A new particle was found at 126 GeV! The world has changed!

• Higgs boson? Is it the one in the (minimal) SM?

New Physics Phenomena (Dark Matter, Neutrino Mass, Baryogenesis)

• Many new physics models contain extension in the Higgs sector

Higgs as a probe of New Physics!

- Toyama Higgs Working Group (1. June /28,29 July /22,23 Sep. /1,2 Dec.)
- It was an informal domestic activity to discuss these points

HPNP 2013 was planned such that we could thoroughly discuss the meaning of Higgs sector with respect to new physics models with world experts!

Toyama International Workshop on Higgs as a Probe of New Physics 2013 (HPNP2013) 13.-16. Feb. 2013

Four-Day Workshop

- 85 participants (25 from abroad)
- 15 invited talks and 20 contributed talks
- 19 poster presentations

(We plan to set the best poster award for students!)

- Excursion (Kamioka Tour)
- Banquet (Okuda-Ya)
- Public Lectures (17. Feb.)

Thank you very much for all participants for coming to Toyama!

Acknowledgements

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J. Hisano, Y. Okada, H. Yamamoto, S. K.

- Toyama City
- Toyama Prefecture
- Toyama Convention Bureau

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Faculty of Science/ Graduate School of Science and Engineering for Education (Science) University of Toyama



Charge for the workshop

Three Questions

- How exactly can we determine the Higgs sector by experiments? (LHC, ILC)
- What kind of dynamics is behind the Higgs sector?
- What kind of new physics can be related to the Higgs sector? How?

In HPNP2013, let us thoroughly discuss these problems!

Additional question: Do we need ILC?

Enjoy Toyama! Enjoy Workshop! Enjoy Higgs Physics!

We welcome you all to HPNP2013!!

