

Mini-workshop
“Hints for New Physics in Heavy Flavors and related topics”
Nagoya Univ., November 15-17, 2018

Welcome

Toru Iijima

Kobayashi-Maskawa Institute

Nagoya University



Kobayashi-Maskawa Institute
for the Origin of Particles and the Universe

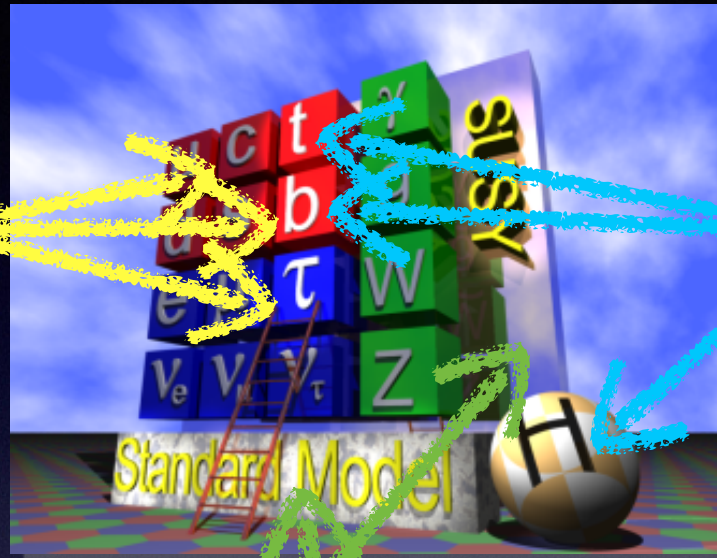
World Research Unit for Heavy Flavor Particle Physics

Program for Promoting the Enhancement of Research Universities

SuperKEKB/Belle II



Toru Iijima
• B, Tau Physics
• Exotic hadrons



Theory
Junji Hisano
Flavor Physics
Dark Matter



LHC-ATLAS



Makoto Tomoto
• Top physics
• Higgs



Peter Krizan
(Ljubljana)



Alessandro Gaz



Kodai Matsuoka



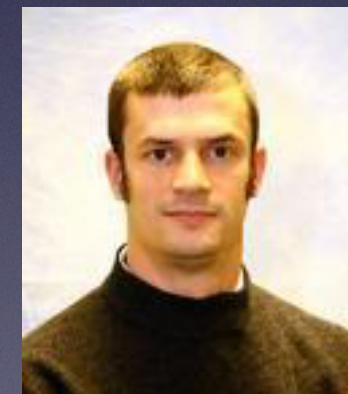
Yuji Omura



Gino Isidori
(Zurich)



Yu Nakahama



Tim Gershon
(Warwick)

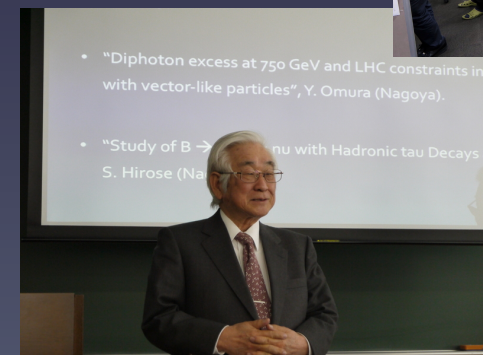
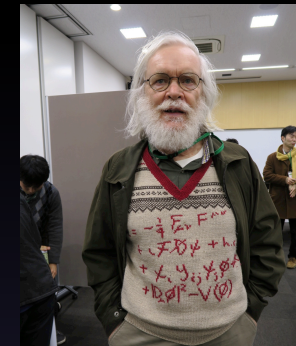


Kaori Yonemura
(secretary)

World Research Unit for Heavy Flavor Particle Physics Symposium 2016

“Interplay between LHC and Flavor Physics”

Nagoya, Japan, 14-15 March, 2016



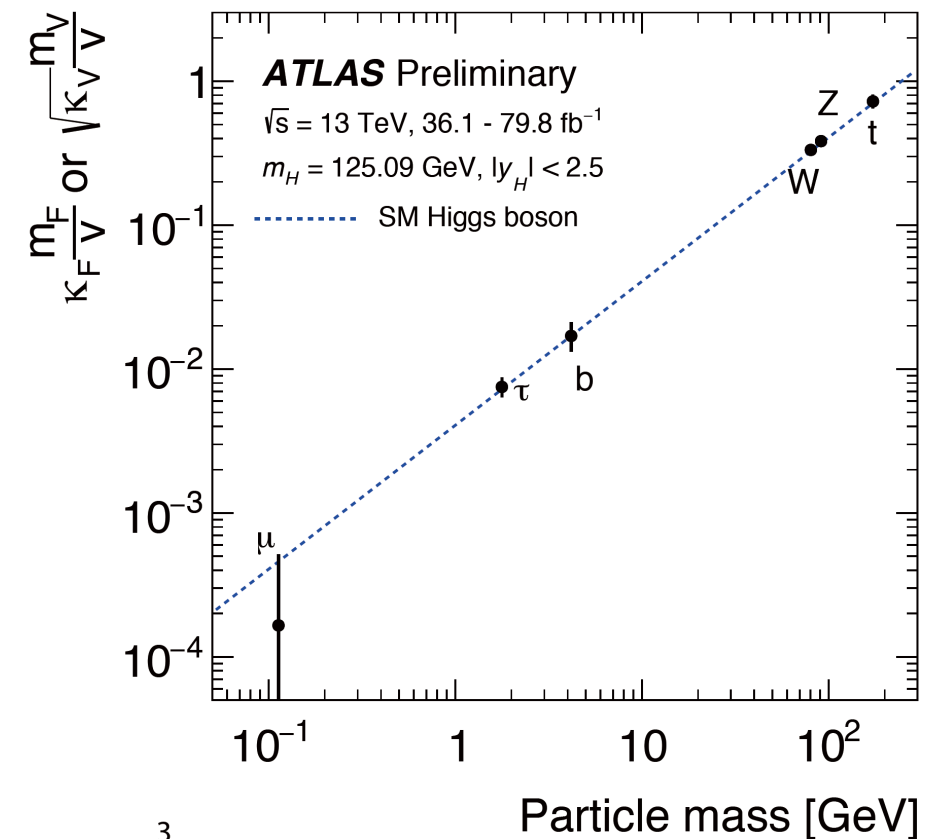
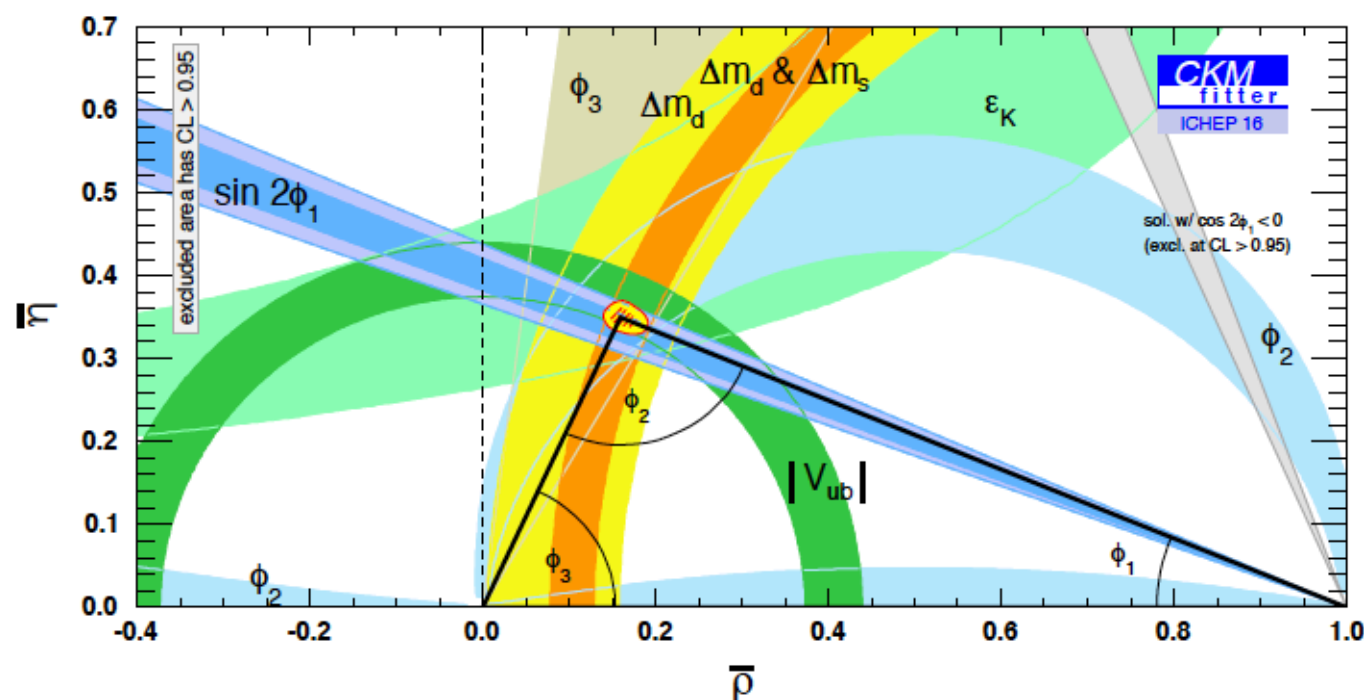
Mini-workshop on $D^{(*)}\tau$ and related topics

Nagoya University, March 27-28, 2017

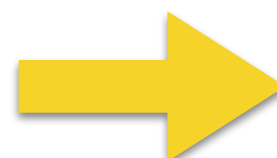


Perfect SM

- CP violation explained by the mechanism proposed by Kobayashi and Maskawa.
- Higgs has been discovered and its couplings to fermions are being measured.



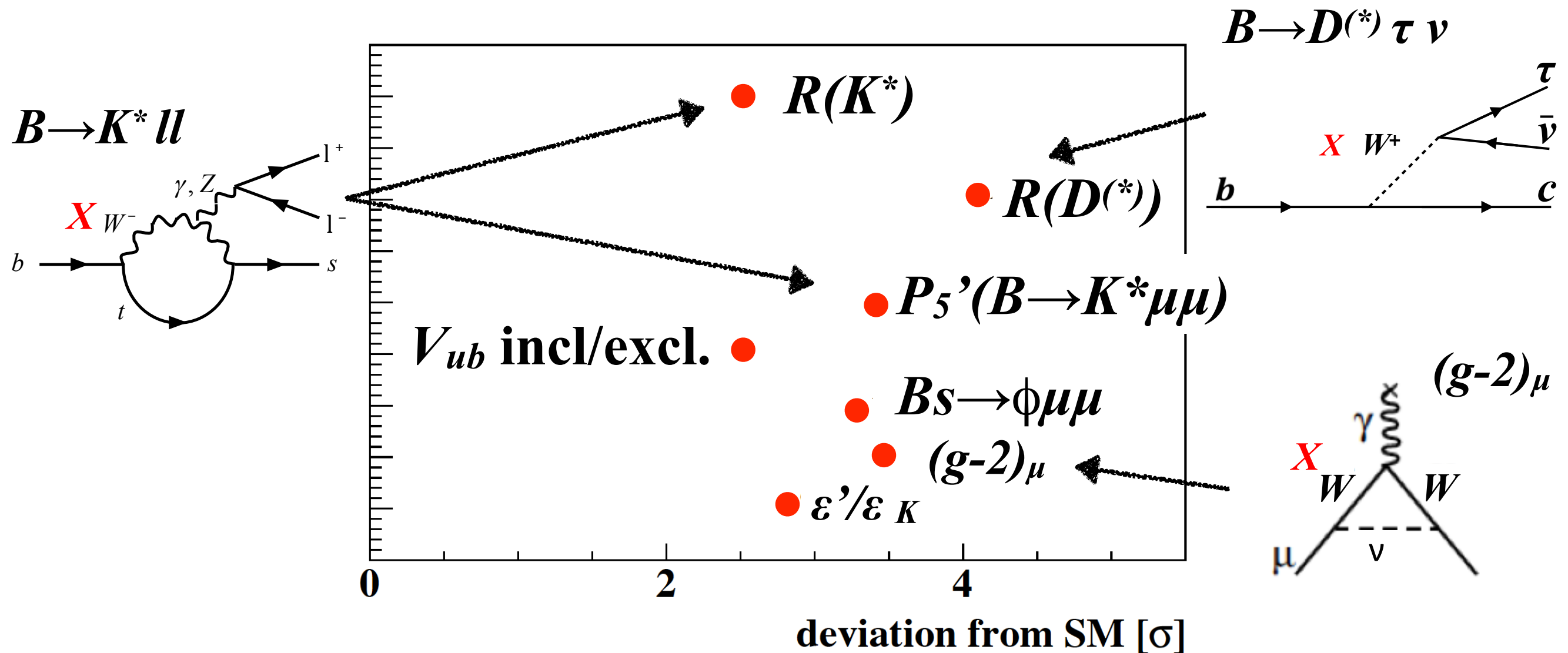
Problems in the SM: naturalness, dark matter, matter-antimatter asymmetry in the Universe, ...



New Physics beyond the SM

Hints of New Physics !

Observed deviation from SM

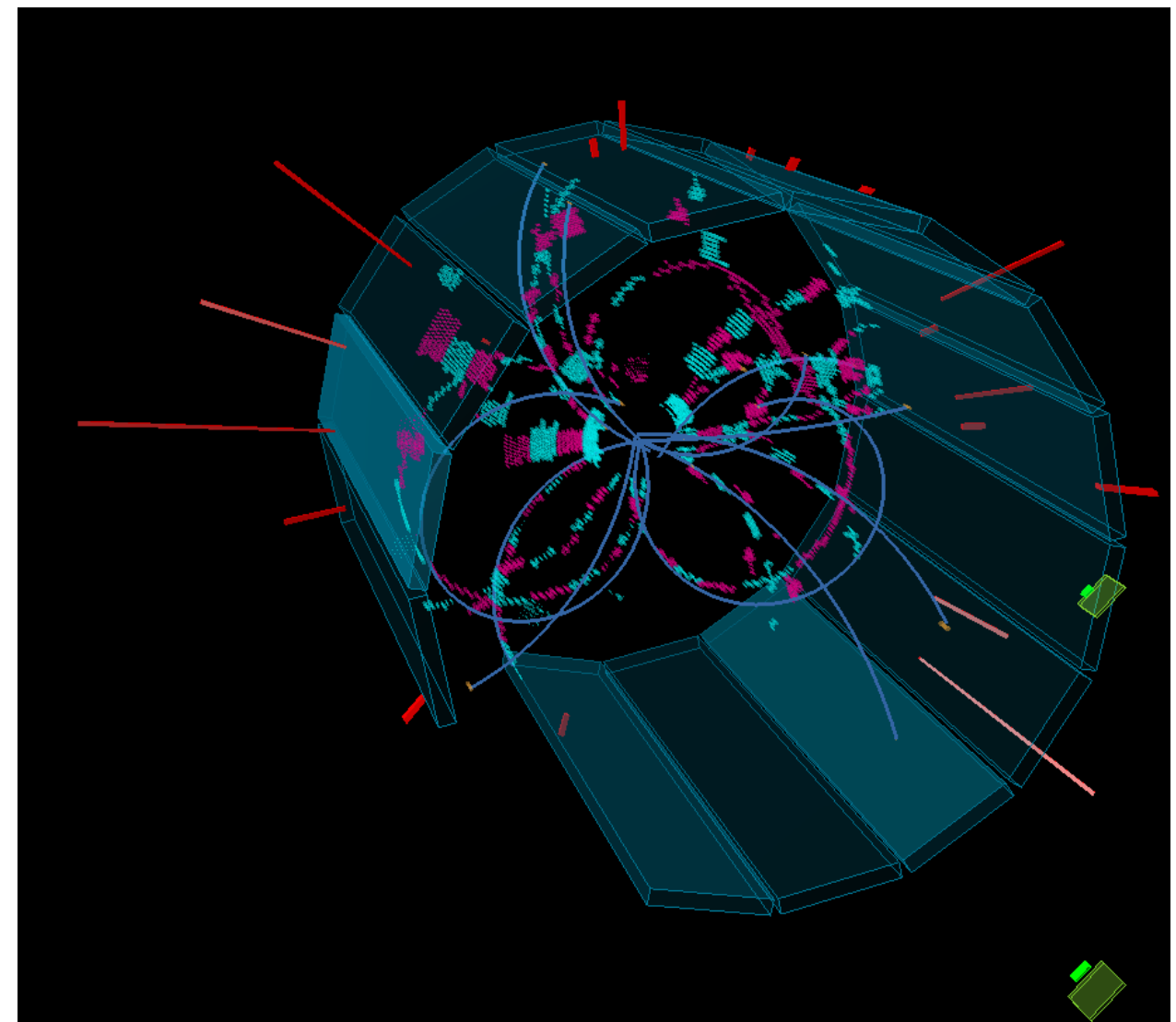
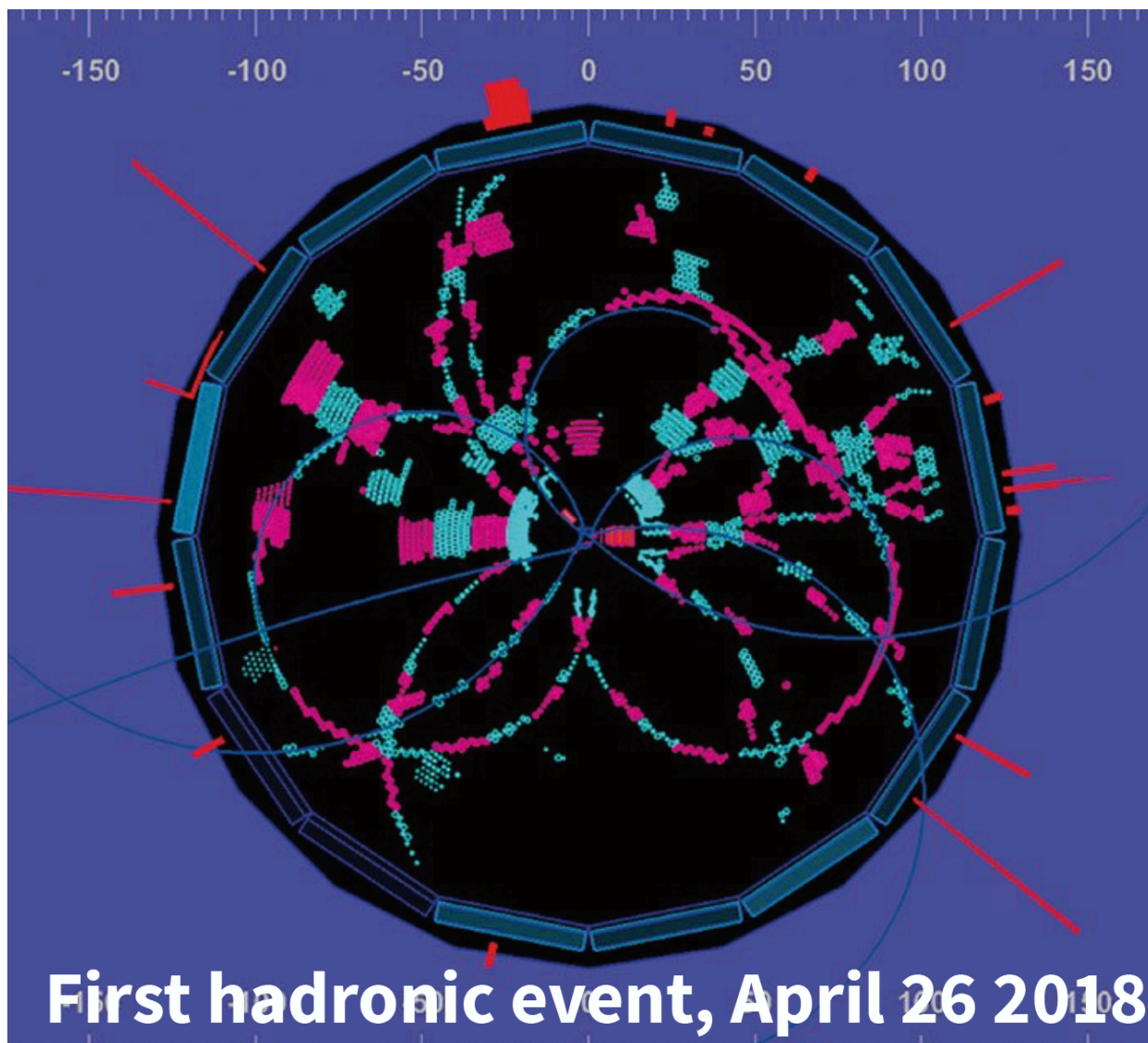


Is Lepton Non-universality the clue to NP ?

First Collision !

0:38, April 26, 2018

7



First Collision !

0:38, April 26, 2018

7



First Collision !

0:38, April 26, 2018

7



Kobayashi @ First collisions ceremony

Purpose

- Review the most recent experimental and theoretical progress on particle physics phenomena involving heavy quarks and leptons and related topics, which may hint the New Physics beyond the Standard Model (or what we do not understand yet).
- Topics will include;
 - New Physics in B and Charm Physics
 - New Physics in Top and high Pt physics
 - New Physics in Tau and related topics (such as muon $g-2$)
 - New Physics in QCD (XYZ hadrons, penta-quarks etc.)
 - Interplay between LHC and flavor experiments

This is a (rather informal) workshop to weigh on discussions among experts.

Please keep time for your presentation !

Practical Info.

- Please upload your slide on INDICO page well beforehand (one day before the talk).
- Modification key : NPhint2018Nov
- Lunch :
 - There are cafeterias, cafes, restaurants, convenience stores in the campus (see the campus map).
 - On 16th, lunch box will be provided for those who ordered.
- Reception/Poster : Nov. 15, 19:00 at the entrance hall of the ITbM building.
- Group dinner : Nov. 16, 19:00 at “SAROS” in Motoyama.
- Group photo : Nov. 16, before lunch

Enjoy !



Hope you have chance to enjoy Nagoya city as well.