

The 14th Workshop on TeV Scale Physics 第十四届TeV物理工作组学术研讨会

April 20 – 22, 2019

南京师范大学/Nanjing Normal University



It has become an important annual conference series in HEP in China

- **Broad topics:**
Higgs, EWSB/EWPT, SUSY
top-quark, flavor/CPv
Neutrinos, DM, axions, cosmo
Exotics, CPTv/LV
- **Important results:** LHC expts, Daya Bay, ...
- **Balanced contributions:** theory / experiments
- **Many junior physicists:** promising!

Good platform for exchange results/ideas.

With the Higgs discovery, the completion of the SM leads to, the 1st time ever,
a relativistic, QM, renormalizable, self-consistent theory,
valid up to an exponentially high scale! ... M_{Pl} ?

“... most of the grand underlying principles
have been firmly established. ... the future
truths of physical science are to be looked for
in the sixth place of decimals.”

--- Albert Michelson (1894)

Michelson–Morley (null) experiments (1887):

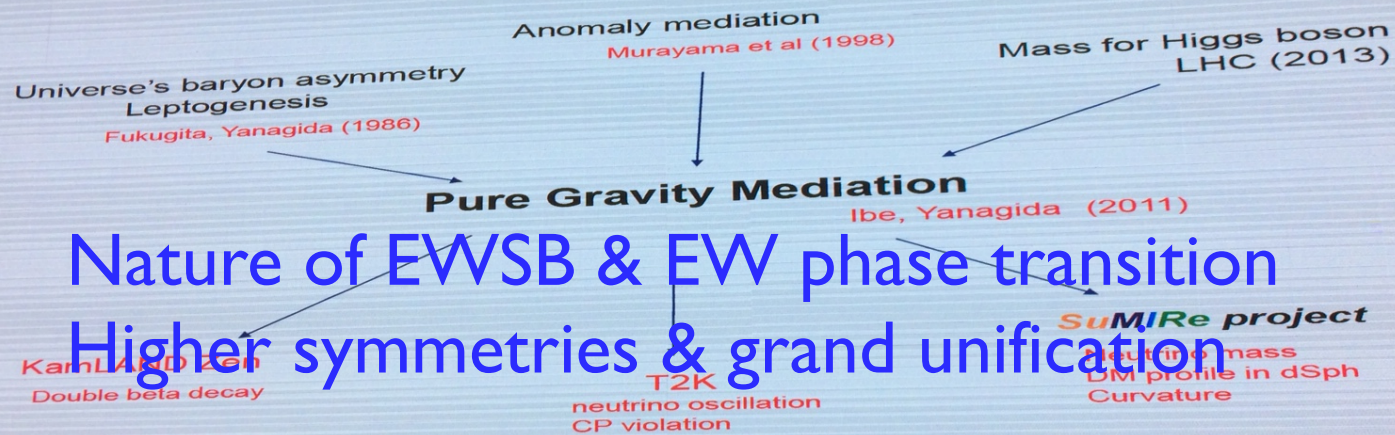
“the moving-off point for the theoretical aspects
of the second scientific revolution”

Will History repeat itself (soon)?

“what Do I Believe Now”

--- Tsutomu Yanagida

- Neutrino mass & matter-antimatter asymmetry
- Nature of the dark matter



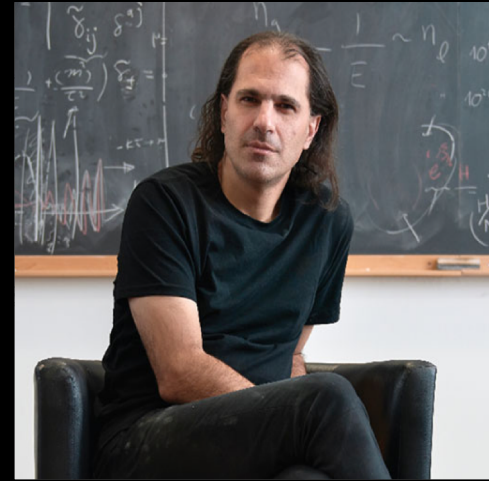
- Nature of EWSB & EW phase transition
- Higher symmetries & grand unification

Discovery of SUSY particles !!!

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We are at an interesting time!

“There has never been a better time to be a physicist. The questions on the table today are not about this-or-that details, but profound ones about the very structure of the laws of nature.” --- Nima Akhavan-Nia



“The Higgs is the most important actor in this story amenable to experimental studies.”

“When theorists are confused, we need more experiments, not less!”

Let's join hands to study TeV scale physics
and promote the CEPC/SppC!

鸣谢 / Acknowledgement

一次非常成功的会议 A Very Successful Workshop!

- 会议注册260余人，到会240余人。
- 共有海内外30多个高校、科研院所与会。

特别感谢会议召集/主持 local organizers :

- 老师：武雷（主席）、肖振军、平加仑、郭立波、刘宁、何秉然、Andrew Fowlie、朱瑞林、黄日俊
- 博后：周航
- 学生：唐天鹏、杨许许、顾玉超、华俊、金苏平、张奇
- 后勤：孙鹏、臧晓文（会务会计）等老师

清华团队 Tsinghua :

- 邝宇平, 王青, 陈新, 安海鹏, 胡震, 韩涛

第十五届 2020 TeV物理工作组学术研讨会

申请 1:

- 承办单位：新疆大学 (XinJiang Univ.), 乌鲁木齐
- 预计时间安排：2020年4月 - 7月
- Local organizer: 薛迅等

申请 2:

- 承办单位：清华大学 (TsingHua Univ.), 北京
- 时间安排：2020年6月 - 7月
- Local organizer: 王青等

Let us know your new proposals
or any comments.

Have a safe trip back home!