

Closing Remarks

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IHEP, Beijing

Workshop on Tau Physics at Belle II and STCF

Aug. 30 – Sept. 1, 2026, Changchun

A very fruitful workshop with nice talks and live discussions

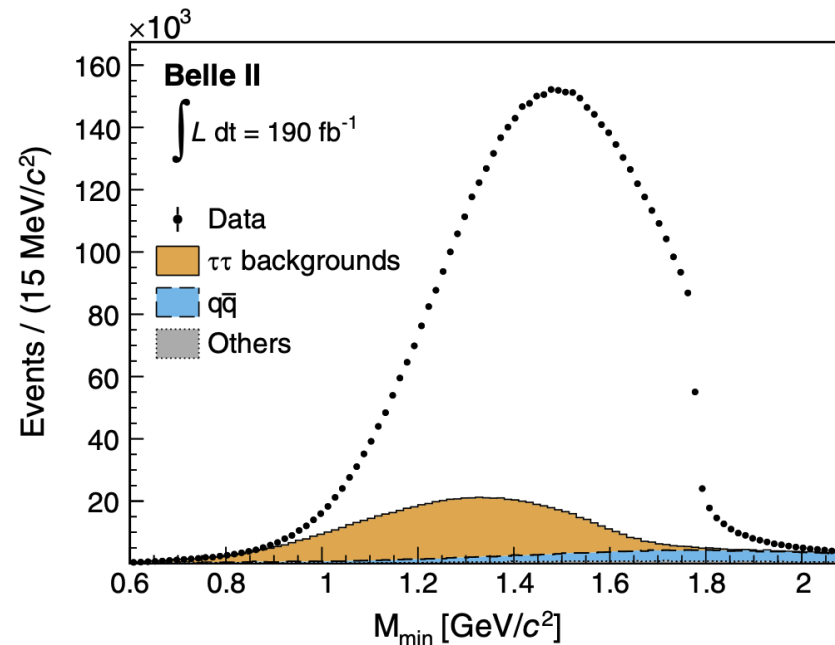
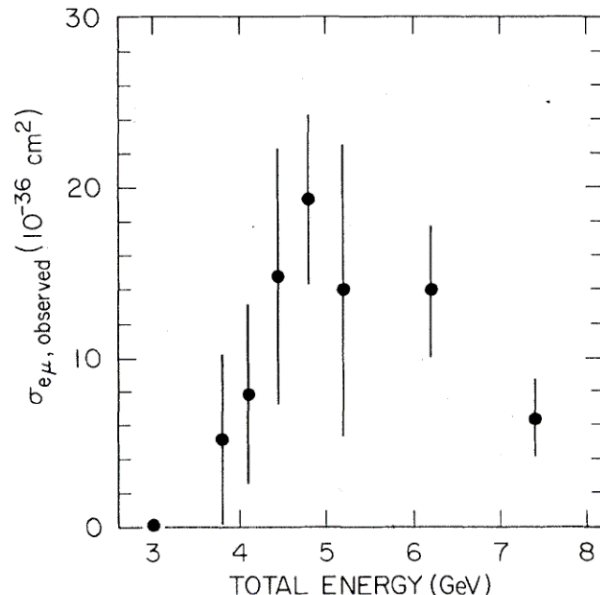
Overview talks on tau decays, tau properties, and tau couplings

1. Prospect of tau decays, Zhiqing Zhang (IJCLab, Orsay)
2. Michel parameters of tau at Belle II, Denis Epifanov (BINP)
3. Precision measurement of tau properties, Fabian Becherer (Jilin U.)
4. True Tauonium, Hua-Sheng Shao (LPTHE, Paris)

τ

M. L. Perl et al.,
PRL35, 1489 (1975)

- 64 e- μ events
- Mass = 1.6-2.0 GeV
- 1995 Nobel Prize



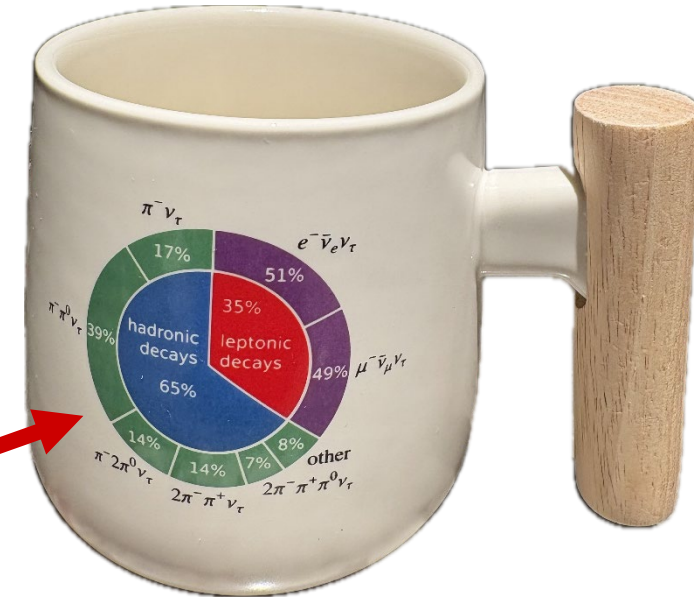
Belle II (2023) ,
PRD108, 032006

- ~4 million evts
- Mass=1777.09
 $\pm 0.08 \pm 0.11$
MeV

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Many talks focus on high precision tau decays & implications:

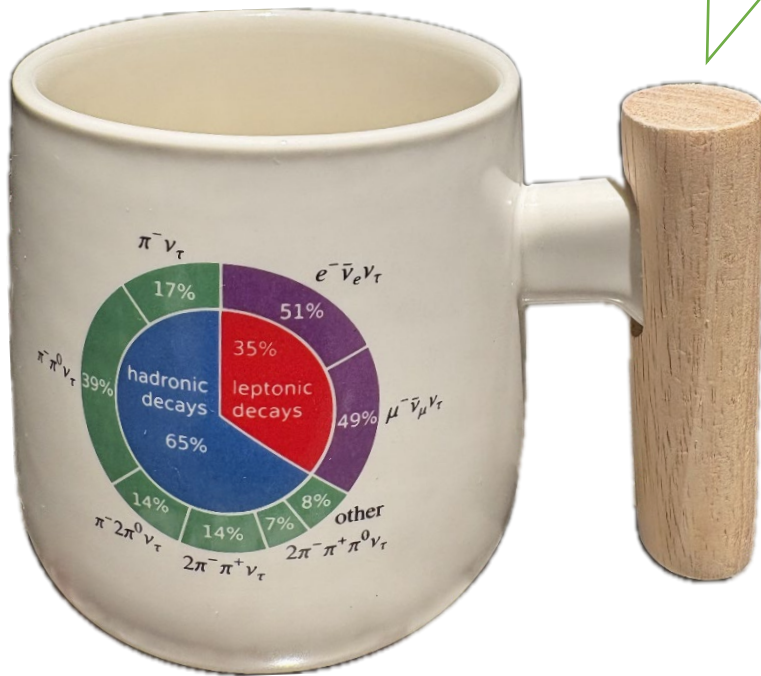
1. Quest for precision in hadronic cross-sections and CVC tests, Gabriel Lopez Castro (Cinvestav)
2. Electromagnetic correction of hadronic tau decays and its implication for muon g-2, Zhi-Hui Guo (Hebei Normal U)
3. Tau decays into two mesons, Sergi Gonzalez-Solis (Barcelona U)
4. Hadronic tau decays at higher orders in QCD, Gauhar Abbas (IIT (BHU), Varanasi)
5. Radiative effects in hadronic tau decays, Denis Epifanov (BINP)
6. Measurement of the BF's of hadronic tau decays ($\tau \rightarrow hhh \nu$ with $h=\pi, K$) at Belle, Alexander Bobrov (BINP)
7. Theoretical study of tau lepton decaying to two vectors or pseudoscalar mesons, Lianrong Dai (Huzhou Normal U)
8. Polarization study of two vector mesons in $\tau \rightarrow VV \nu$, Hiroyuki Umeeda (Jilin U)
9. Measurements of V_{us} at Belle II, Michele Mantovano (DESY)
10. Physics-informed GNN for tau+tau- vertex reconstruction at STCF, Chentao Bao (ZJU)



BFs, SFs, polarization,
decay dynamics
New theo. calculations
New exp. techniques
CVC, HVP, a_μ , α , α_s , V_{us} ,
 m_s , ...

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Something NEW!
Not in the pie chart!



A few talks on high sensitivity studies of fundamental laws of physics:

1. CP symmetry in tau $\rightarrow$ K pi nu decays, Xin-Qiang Li (CCNU)
2. Searches for new particles in tau decays at Belle and Belle II, Dimitri Liventsev (KEK)
3. Tau CLFV decays, Laura Zani (INFN)

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Overview talks on tau physics at running & future exps

1. Tau physics **at Belle II**, Petar Rados (Nagoya University)
2. Tau physics status **at STCF**, Mingyi Liu (USTC)
3. Tau physics status **at BESIII**, Jianyong Zhang (IHEP)
4. Tau Physics Feasibility Studies **at CEPC**, Manqi RUAN (IHEP), Manqi Ruan (IHEP)
5. Tau physics **at FCC-ee**, Alberto Lusiani (SNS and INFN, sezione di Pisa)

τ

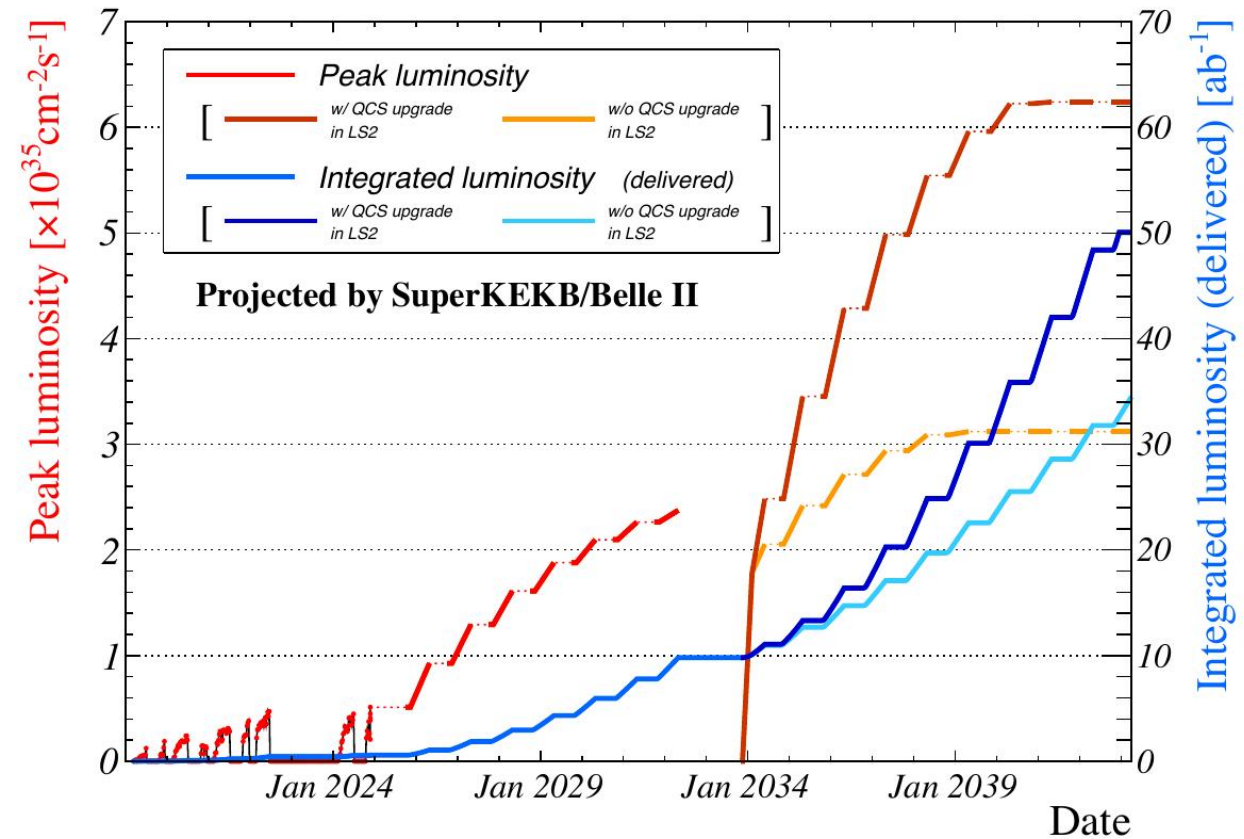
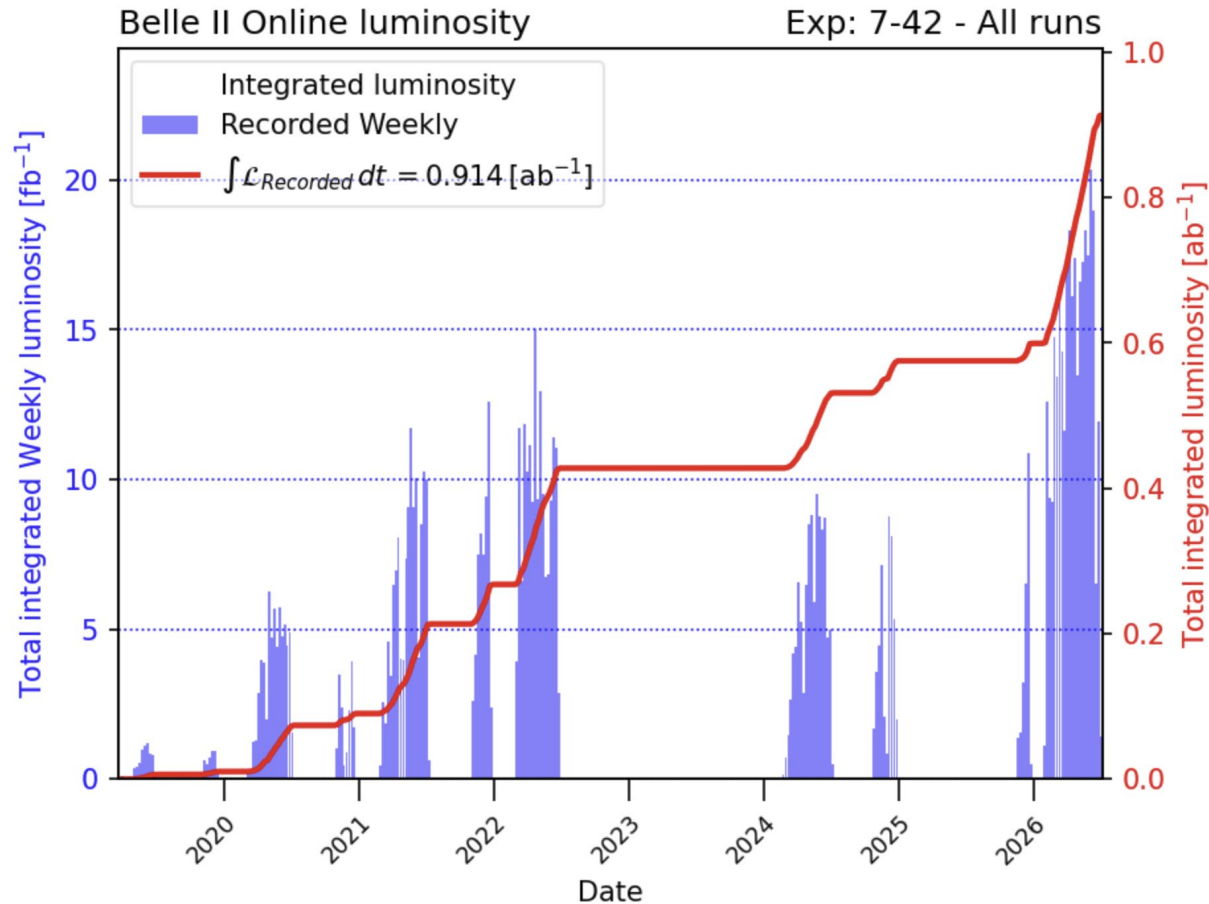
e^+e^- colliders

Workshop on Tau Physics at Belle II and STCF

2026年8月30日 到 2026年9月1日

Asia/Shanghai 时区

Hope more Belle II results published in the coming years



... and more results from BESIII, LHCb, ... as well
Hope STCF & other proposed facilities be approved ...

Thank all the speakers, on site and online; thank all the participants.
Your contribution to the workshop is highly appreciated!



Thank the AC for proposing the talks!

Thank School of Physics & LOC for organizing the workshop in Changchun, a nice city with nice hotel, nice workshop venue, nice food, and nice weather!

Advisory Committee

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Thank you all for the participation!

Thank Weimin & his group for organizing
the Workshop on tau physics at Belle II and STCF!

Bon voyage! 返程顺利!