

Michel Shaping my Career over the last 30 Years



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张智庆



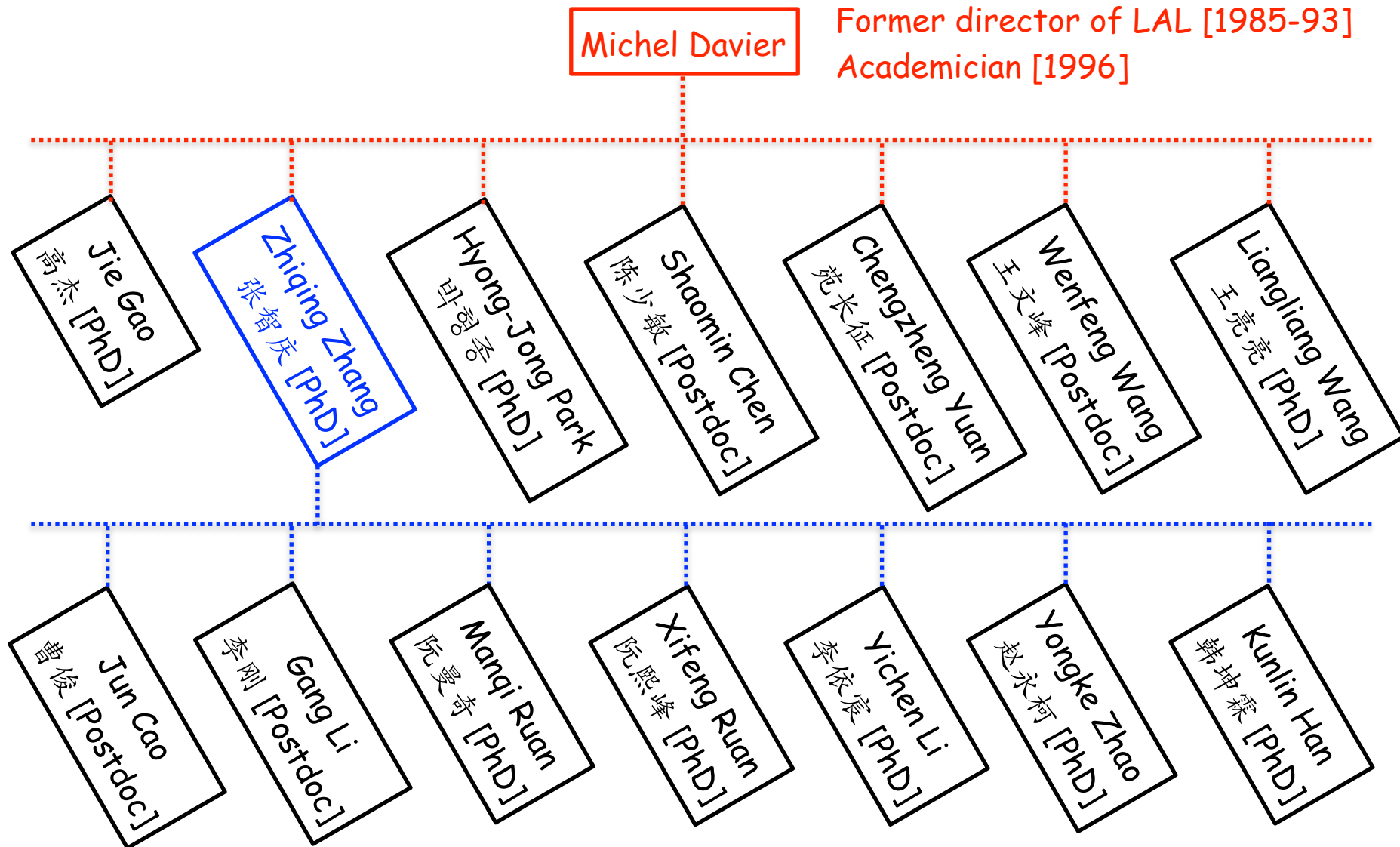
Outline

- IHEP & LAL
- Student, collaborator, research activities
- Summary

IHEP & LAL

- Was at IHEP (division 4) in 1984-1989 doing my master with Prof. Dandi Wu (吴丹迪) and PhD with Prof. Tao Huang (黄涛)
- Had a chance visiting LAL in Dec. 1989 and continued my PhD with Michel doing data analysis in ALEPH at LEP
- Became a permanent researcher at LAL since 1992 working on
 - H1 at HERA ep collider since 1992
 - ILC e+e- project 2001-2008
 - ATLAS at the LHC pp collider since 2008
 - Phenomenology with Michel since 2002

Educational "Genealogy"



Incomplete lists, some of the Chinese and foreign students/postdocs are not shown

1996: Youngest French Academician in Physics



ZZ Andreas Michel
 Hoecker

Andreas: a student of Michel, CERN physicist, former physics coordinator and current deputy spokesperson of ATLAS

Supervisor & President of Jury Committees

- PhD thesis (1992): Study of tau lepton decays with the ALEPH detector at LEP
 - We resolved the long-standing “one-prong” problem in tau decays
 - Michel being the LAL director was my supervisor and president of the dissertation committee

- Habilitation thesis (博导资格答辩, 2000): New insights into the proton structure with ep collider HERA
 - Michel “imposed” that I worked on H1 after my PhD thesis
 - All my knowledge on structure functions & PDFs of proton
 - Michel was also president of the examination committee

4 Publications with Michel in/for ALEPH

- 1992: Measurement of tau branching ratios, *Z. Phys. C* 54 (1992) 211
- 1993: Measurement of the strong coupling constant using tau decays, *Phys. Lett. B* 307 (1993) 209
- 2005: Branching ratios and spectral functions of tau decays: final ALEPH measurements and physics implications, *Phys. Rept.* 421 (2005) 191 [hep-ex/0506072]
- 2014: Update of the ALEPH non-strange spectral functions from hadronic tau decays, *Eur. Phys. J. C* 74 (2014) 2803 [arXiv: 1312.1501]

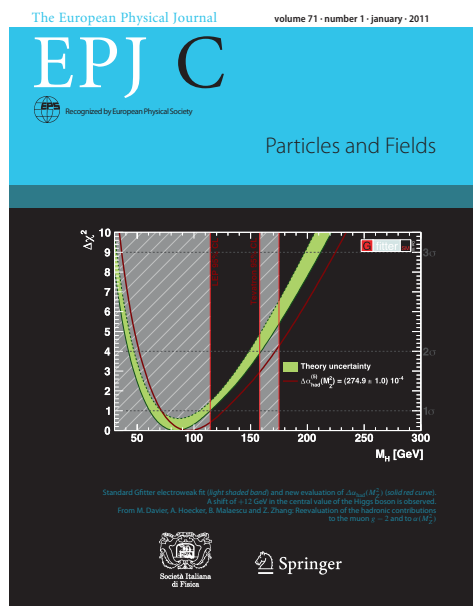
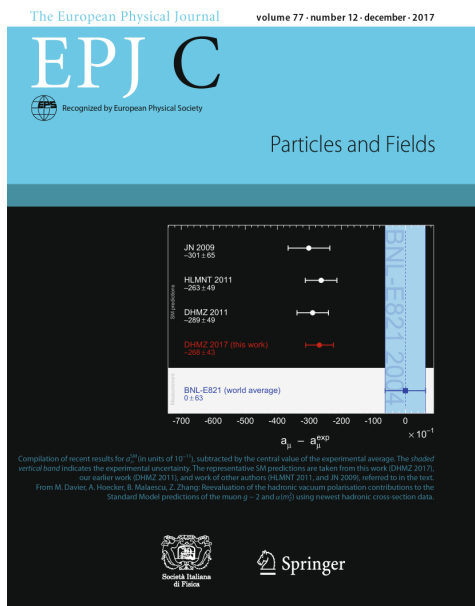
8 Publications with Michel on Phenomenology

- 2002: Confronting spectral functions from $e+e-$ annihilation and tau decays, Eur. Phys. J. C 27 (2003) 497 [hep-ph/0208177]
- 2003: Undated estimate of the muon magnetic moment using revised results from $e+e-$ annihilation, Eur. Phys. J. C 31 (2003) 503 [hep-ph/0308213]
- 2005: The physics of hadronic tau decays, Rev. Mod. Phys. 78 (2006) 1043 [hep-ph/0507078]
- 2008: The determination of a_s from tau decays revisited, Eur. Phys. J. C 56 (2008) 305 [arXiv:0803.0979]
- 2009: Reevaluation of the hadronic contribution to the muon magnetic anomaly using new $e+e- \rightarrow \pi+\pi-$ cross section data from Babar, Eur. Phys. J. C 66 (2010) 1 [arXiv:0908.4300]
- 2010: Reevaluation of the hadronic contributions to the muon $g-2$ and $a(MZ)$, Eur. Phys. J. C 71 (2011) 1515 [arXiv:1005.2741]
- 2016: Hadronic contribution to vacuum polarisation, the standard theory of particle physics - essays to celebrate CERN's 60th anniversary, Adv. Ser. Direct. High Energy Phys. 26 (2016) 129
- 2017: Reevaluation of the hadronic vacuum polarisation contributions to the Standard Model predictions of the muon $g-2$ and $a(m_Z)$ using newest hadronic cross section data, Eur. Phys. J. C 77 (2017) 827 [arXiv:1706.09436]

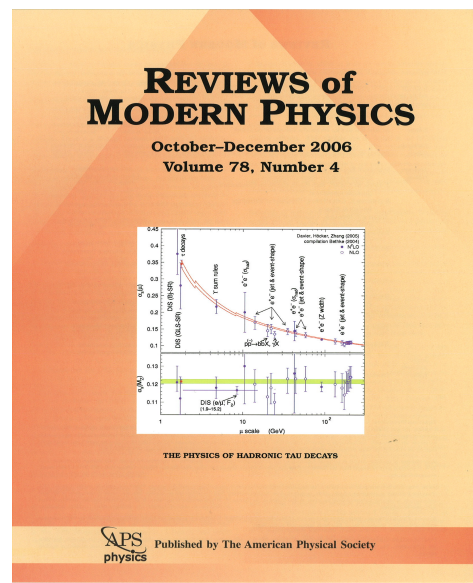
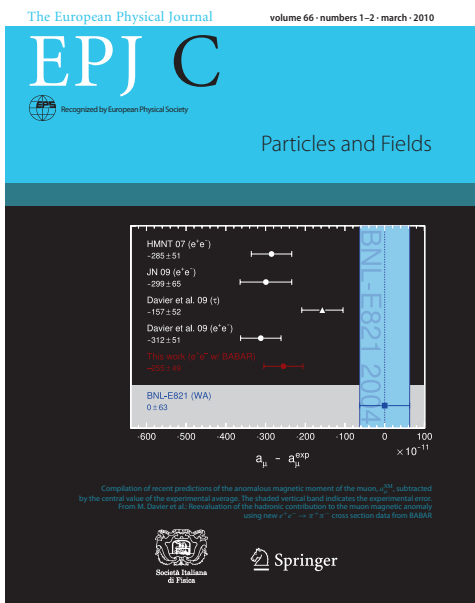
Impact of Michel on my Selected Publications

1. 2012: Observation of a new particle in the search for the Standard Model Higgs boson with the ATLAS detector at the LHC, Phys. Lett. B 716 (2012) 1 [arXiv:1207.7214]; > 8000 citations
2. 2009: Combined measurement and QCD analysis of the inclusive $e\pm p$ scattering cross section at HERA, JHEP 01 (2010) 109 [arXiv:0911.0884]; > 900 citations
3. 2010: Reevaluation of the hadronic contributions to the muon $g-2$ and to $\alpha(m_Z)$, Eur. Phys. J. C 71 (2011) 1515 [arXiv:1010.4180]; > 700 citations
4. 2005: Branching ratios and spectral functions of tau decays: final ALEPH measurements and physics implications, Phys. Rept. 421 (2005) 191 [hep-ex/0506072]; > 300 citations
5. 2005: The physics of hadronic tau decays, Rev. Mod. Phys. 78 (2006) 1043 [hep-ph/0507078]; ~ 250 citations

Our Figures Selected on Journal Cover



2017 2011



2010 2005

Half of our publications on phenomenology were selected!

Summary

- Vision
- Kindness, friendship
- Passion
- Rigor
- Perseverance
- Expert/reference in the field