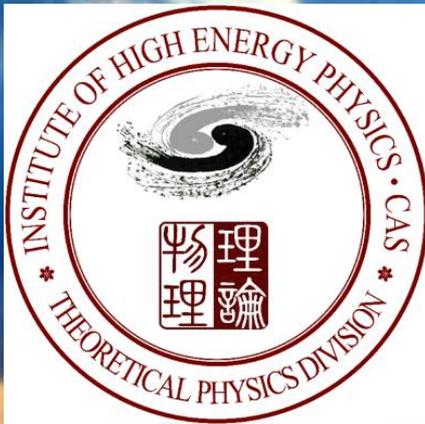


a Chinese particle physicist's outreach via blogging

Zhi-zhong Xing
IHEP and UCAS



OUTLINE

- ◆ Quantum Diaries in 2005
- ◆ Science Net since 2007
- ◆ What I've done in blogs
- ◆ Blogging: pros and cons

Quantum diaries: why me?

2

One day in the end of 2004, I met Prof. **Hesheng Chen**, the director of IHEP at the time, on campus. He told me that I was recommended to join the **Quantum Diaries** blogosphere, which will be established soon at Fermilab to celebrate the forthcoming **World Year of Physics 2005**, as the only Chinese blogger on behalf of IHEP.

XING: Why me? I think it should be better to invite an experimentalist to do this job.

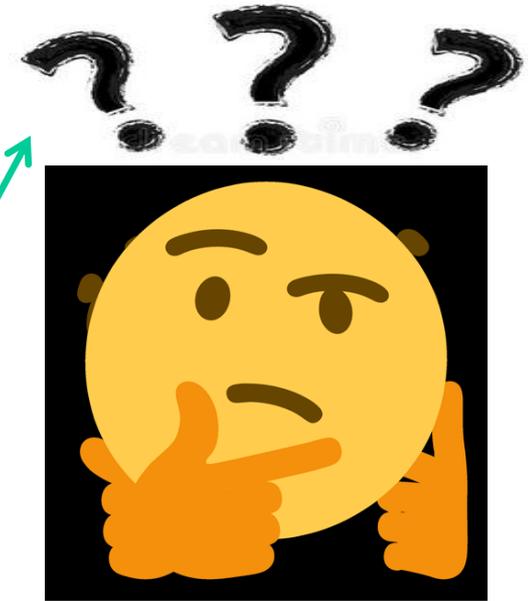
CHEN: No, no. You are the right person for it, because experimentalists are always busy.

Three question marks appeared over my head

Doesn't the director think we theorists are as busy as those experimentalists?

XING: Okay, but I really don't know what to do with this.

CHEN: I don't know either. But you will eventually know.



In this connection I have no regret to be the first person to try tomato

Q-diaries in 2005

3

QUANTUM DIARIES journal diario 전포 tagebuch

Follow physicists from around the world as they live the World Year of Physics.

ZHI-ZHONG XING

IHEP



My self-introduction:

An enjoyable life style for me is to travel widely in the sunshine and to experience A. Einstein's unification of space and time. That feeling does not require the introduction of extra dimensions in my heart.

自我介绍：行走于阳光斑斓的山水之间，感受爱因斯坦的时空变换，对我来说是一种惬意的生活方式，一种让人心静的生命体验。

My first blog was in Chinese and about the **Daya Bay experiment**, under planning at the time.

05-1-18

中国大亚湾中微子振荡实验

我的第一篇日记介绍一下正在酝酿中的中国大亚湾核反应堆中微子振荡实验，其目的在于测量最小的轻子味混合角 θ_{13} 。

Successful in 2012



Harald Fritzsch, myself — Photo by M. Veltman



8/3/2012, Y. Wang

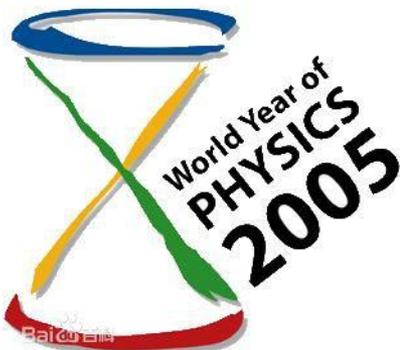
What I wrote in Q-diaries

4

I totally wrote **36** blogs during 2005, in either English or Chinese. The topics that these writings covered include:

- ◆ The Daya Bay experiment
- ◆ The BEPC / BES experiment
- ◆ The strong CP problem
- ◆ The other side of Albert Einstein
- ◆ News on Sino-CERN cooperation
- ◆ A theorist's gain and loss
- ◆ Werner Heisenberg's life story
- ◆ An equation that changed the world
- ◆ James Bjorken's "Data Matters"
- ◆ Richard Feynman's psychology

Chinese version of Prof. Fritzsche's book

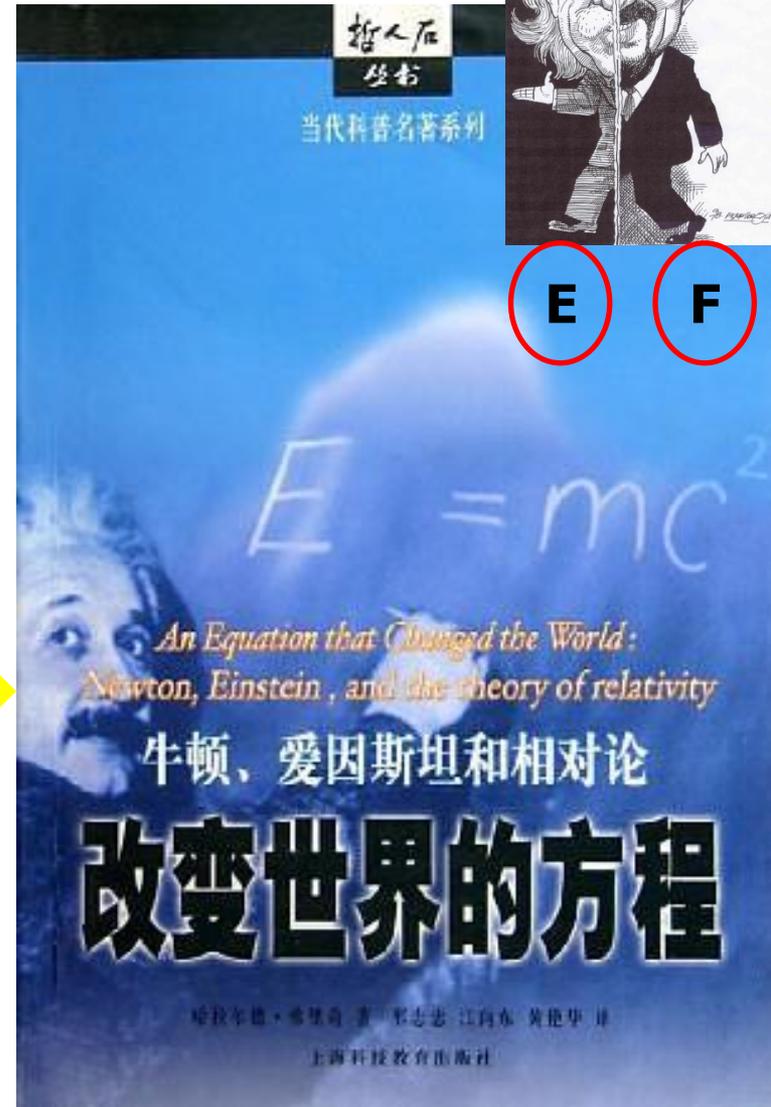


The translators:
Zhi-zhong Xing
Xiang-dong Jiang
Yan-hua Huang



E

F



Suitable topics for blogging

5

After one-year blogging, I summarized some topics which are suitable for education and outreach in blogs.

- ◆ **Timely hot topics**

Such as the latest scientific breakthroughs, news on Nobel Prize, etc

- ◆ **Historical events**

Such as the celebration of an important scientist's anniversary, etc

- ◆ **Popularizing knowledge**

Such as basic but important knowledge, new scientific frontiers, etc

- ◆ **Miscellaneous**

Such as methodology, research fund, student-supervisor relation, ...

Key question: what is my own taste or style?

- ◆ Try to be humorous and sometimes even unpredictable in my blogs.
- ◆ Try NOT to argue with other bloggers or unprofessional passers-by.
- ◆ Sometimes focus on EXOTIC topics like scientists' EQs, wagers, etc.

The launch of Science Net

6



这10年

科学网

2007.1---2017.1
sciencenet.cn



科学网微信



科学网微博



Launched on 2007-1-18

Chinese Academy of Sciences

2007年
1月18日

2008年

2009年

2010年

2011年

2012年

2013年

2014年

2015年

2016年

2017年

1

2

3

4

5

6

7

8

9

10

I was invited to join at the beginning but I hesitated for quite a while.

I changed my mind, and joined it *in the fall of 2007*, simply because I wanted to find a place to put away my popular science writings.

It turned out that I became known thanks to my Science Net blogging

Bloggging in Science Net

7

所谓江湖

<http://blog.sciencenet.cn/u/xingzz> [复制]

伪老派知识分子 职业理论物理学家

My first blog in Science Net, 2007-9-24

博客首页 动态 微博 博文 相册 主题 分享 好友 留言板

博文

发表新博文

莫斯科遍地新娘

Full of brides in the streets of Moscow

A story about my participation in ICHEP2006 in Moscow and giving a parallel talk.

已有 6791 次阅读 2007-9-24 2



2018年09月28日 星期四

用户名:

密码:

登录

注册

找回密码

设为首页

中文 | English



博客

生命科学 | 医学科学 | 化学科学 | 工程材料 | 信息科学 | 地球科学 | 数理科学 | 管理综合

电子杂志 | 手机版

首页 | 新闻 | 博客 | 群组 | 人才 | 会议 | 论文 | 基金 | 大学 | 国际

本站搜索

当前位置: 科学网 > 博客首页

进入我的博客 | 科学网博客 | 博主委员会 | 博客帮助 | 博文搜索

公告栏

更多>

科学家的“3P”原则

科学研究的过程往往考验科学家的多方面能力和心理素质。一个“3P”原则，Perception（眼光）、Persistence（坚持）、Power（能力）。Perception总是第一位的……邢志忠

Perception Persistence Power

Protect yourself
Perform at your peak
Promote your life

My latest blog on 2018-6-28

Scientists' 3P principles

I've written
~400 blogs



2008-8-7

The ICHEPs and myself

我与国际高能物理大会(ICHEP)  精选



已有 5271 次阅读 2008-8-7 05:11 | 个人分类:随笔 | 系统分类:科研笔记 推荐到群组

隐藏

Theoretical Overview of Neutrino Properties

Zhi-zhong Xing (邢志忠)

IHEP, Beijing

Y. Totsuka
E. Witten

.....



ICHEP2008, Philadelphia, USA, July 29th – August 5th, 2008

A story about my participation in ICHEP2008 and giving a plenary talk

2009-3-23

Schroedinger's life-style issue

薛定谔老师的生活作风问题

已有 21611 次阅读 2009-3-23 22:01 | 个人分类:随笔 | 系统分类:人物纪事 推荐到群组

On 23 March 2009, **Masatoshi Koshiba** gave a lecture about neutrino physics at Tsinghua University in Beijing. After the lecture, **C.N. Yang** invited Koshiba for dinner, and I was lucky to join.

During the dinner C.N. Yang told some funny stories on **Erwin Schroedinger's** life-style issues. So I wrote a fast blog for this at that night.

Two questions were addressed in blog
—Where and when did Schroedinger invent his great equation?

—What can one learn from him?

The other side of a great physicist



Erwin Schrödinger

Example in 2010

三千科学家挂名一篇文章：作者人数成灾(续)

2010-4-2

3000 authors in a paper



已有 9662 次阅读 2010-4-2 12:02 | 个人分类:新闻 | 系统分类:科研笔记 推荐到群组



Contents lists available at ScienceDirect

Physics Letters B

www.elsevier.com/locate/physletb



Totally 22 pages; authors and institutes: 12 pages

Charged-particle multiplicities in pp interactions at $\sqrt{s} = 900$ GeV measured with the ATLAS detector at the LHC $\star, \star\star$

ATLAS Collaboration

To be No. 1, you'd better have a good family name

ARTICLE INFO

Article history:

Received 16 March 2010

Received in revised form 22 March 2010

Accepted 22 March 2010

Available online xxxx

Editor: W.-D. Schlatter

Keywords:

???

ABSTRACT

The first measurements from proton-proton collisions recorded with the ATLAS detector at the LHC are presented. Data were collected in December 2009 using a minimum-bias trigger during collisions at a centre-of-mass energy of 900 GeV. The charged-particle multiplicity, its dependence on transverse momentum and pseudorapidity, and the relationship between mean transverse momentum and charged-particle multiplicity are measured for events with at least one charged particle in the kinematic range $|\eta| < 2.5$ and $p_T > 500$ MeV. The measurements are compared to Monte Carlo models of proton-proton collisions and to results from other experiments at the same centre-of-mass energy. The charged-particle multiplicity per event and unit of pseudorapidity at $\eta = 0$ is measured to be $1.333 \pm 0.003(\text{stat.}) \pm 0.040(\text{syst.})$, which is 5–15% higher than the Monte Carlo models predict.

2010 Published by Elsevier B.V.

A ball-park feeling of the scale of a high-energy-physics collaboration



Example in 2011

2011-12-15

Research: how can you sleep at the zero hour?

科研感悟：关键时刻，怎能睡觉？！ 精选

已有 14630 次阅读 2011-12-15 11:03 | 个人分类:随笔 | 系统分类:科研经

科研, 论文, 高能物理, 上帝粒子 推荐到群组

Planck scale

$$\Lambda \sim 10^{19} \text{ GeV}$$

GUT scale?

$$\Lambda \sim 10^{16} \text{ GeV}$$

Seesaw scale?

$$\Lambda \sim 10^{12} \text{ GeV}$$

TeV / SUSY?

$$\Lambda \sim 10^3 \text{ GeV}$$

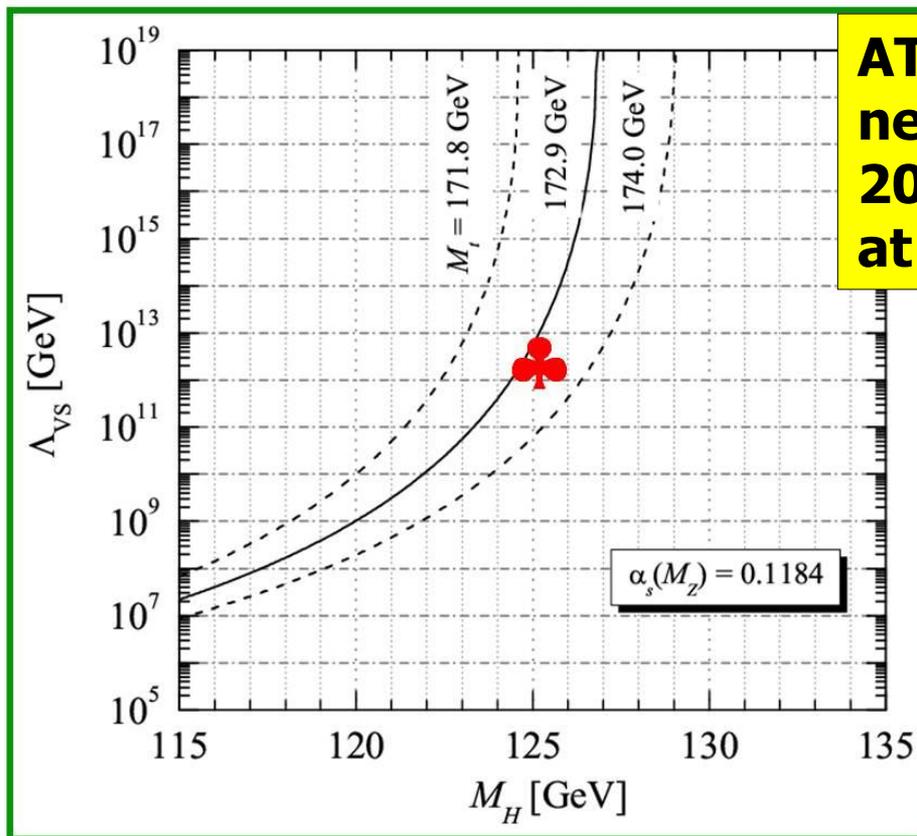
Fermi scale

$$\Lambda \sim 10^2 \text{ GeV}$$

QCD scale

$$\Lambda \sim 10^2 \text{ MeV}$$

The SM vacuum stability for a light Higgs



**ATLAS + CMS
news release:
2011-12-13
at 9 pm (BT)**

**A
moment
of
truth
in
your
career**

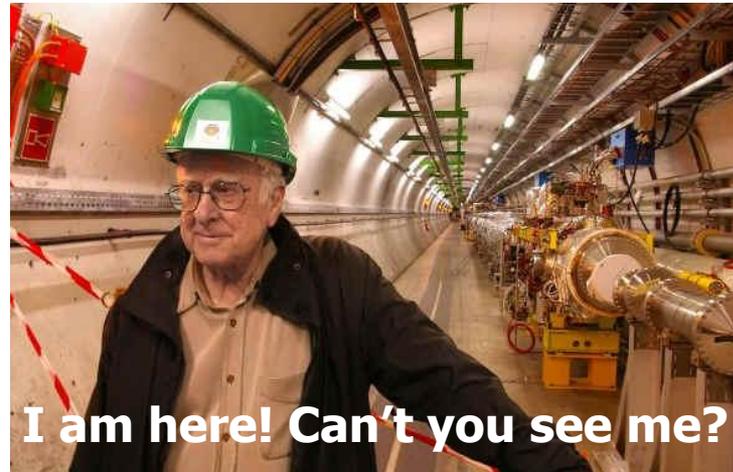
Elias-Miro et al., arXiv:1112.3022;
Xing, Zhang, Zhou, arXiv:1112.3112; ...

Even if we worked the whole night long, we had no way to be No. one

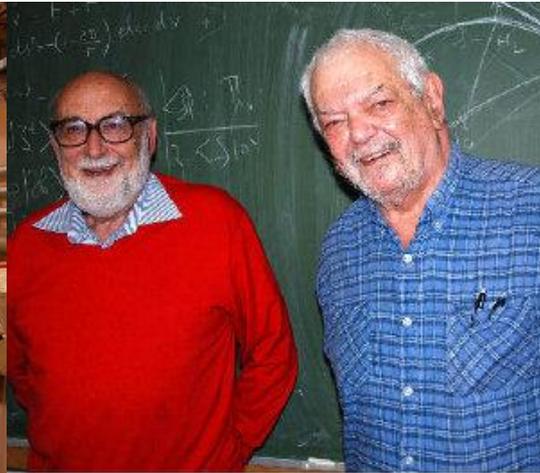
Example in 2012

希格斯赢了！ 精选2012-7-4
Higgs won!

已有 26121 次阅读 2012-7-4 17:23 | 个人分类:新闻 | 系统分类:博客资讯 推荐到群组



I am here! Can't you see me?



June 4, 2012, at CERN

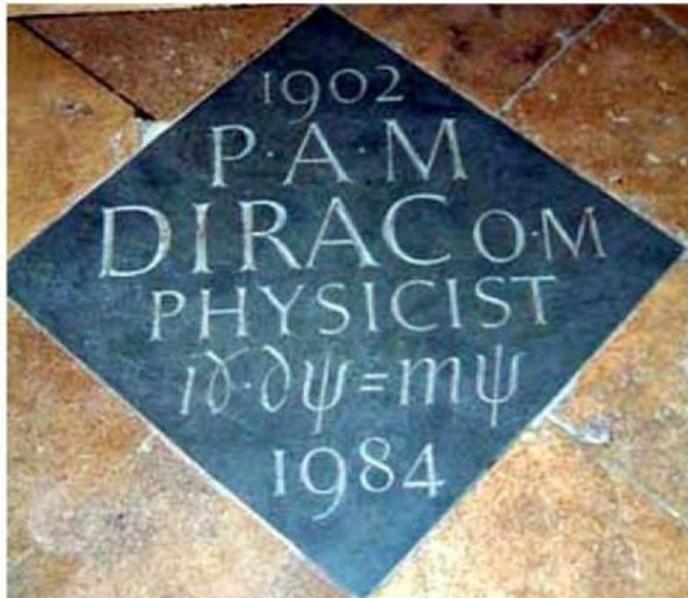
作者	期刊	稿件到达时间	稿件发表时间
恩格勒特、布罗特	Phys. Rev. Lett. 13 (1964) 321	1964年6月26日	1964年8月31日
希格斯	Phys. Lett. 12 (1964) 132	1964年7月27日	1964年9月15日
希格斯	Phys. Rev. Lett. 13 (1964) 508	1964年8月31日	1964年10月19日
古拉尔尼克、哈根、基伯	Phys. Rev. Lett. 13 (1964) 585	1964年10月12日	1964年11月16日

Who's first?**Englert
Brout****Higgs****Higgs****Guralni
Hagen
Kibble****What can we learn from Peter Higgs?****His success is not repeatable!**

Example in 2013

2013-7-9

Equations on tombstones

刻在墓碑上的方程式  精选已有 20105 次阅读 2013-7-9 10:02 | 个人分类:科普 | 系统分类:科普集锦 | 关键词:方程式 |  方程式 推荐到群组

墓碑上的方程式



NOT YET

Hawking's dream
on his 60-fest, 11
January 2002.

$$S_{\text{BH}} = \frac{kA}{4\ell_{\text{P}}^2}$$

S. Hawking: I would like this simple formula to be on my tombstone.

我的滑雪照上了《欧洲核子研究中心快报》

已有 9063 次阅读 2014-5-3 08:07 | 个人分类:江湖 | 系统分类:博客资讯

Faces & Places **CERN Courier 2014**

SCHOOL ITEP hosts winter school of physics

The 17th International Moscow School of Physics (the 42nd ITEP Winter School) took place on 11–19 February near Moscow. The ITEP Winter School of Physics, which dates back to 1973, became international in 1994 and attracts participants from leading research centres and universities. This year the programme included lectures on Higgs-boson physics, flavour physics and new results from the LHC, as well as cosmology, dark matter, quarkonia and neutrino physics. In addition, there were talks on higher-spin gauge theories and the status of the International Linear Collider.

Students from eight countries – Belgium, Belorussia, France, Germany, Kazakhstan, Russia, Ukraine and Vietnam – enjoyed the Russian winter and presented their results at the Young Scientists Forum, where Alexander Novikov and Max Zoller received diplomas for the best experimental and theoretical presentations.

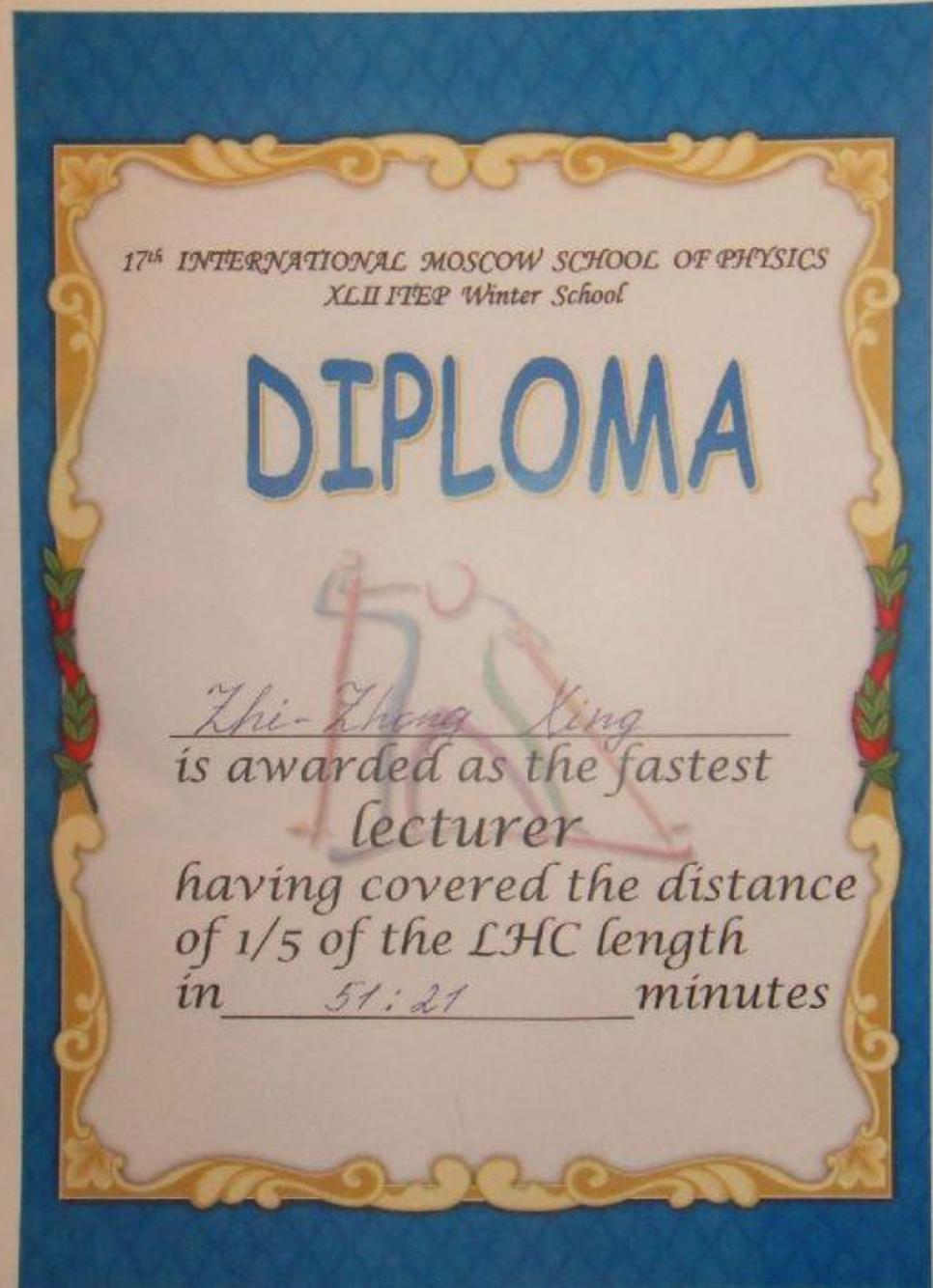


Zhi zhong Xing, who lectures on physics, in the school's traditional competition. (Image credit: ITEP.)

● For a list of lecturers and their presentations, see http://ws.itep.ru/?page_id=169.

I was luckily voted in as the **Best Lecturer** in this school.

Why I'm the fastest lecturer?



Example in 2015

今天，关于超对称的赌局：诺奖得主输了！  精选

已有 21687 次阅读 2015-7-8 09:15 | 个人分类:科普 | 系统分类:科普集锦 推荐到群组

2015-7-8
Bet on SUSY:
Wilczek lost!



On 8 July 2009, **Garrett Lisi** made a bet with **Frank Wilczek** that the LHC wouldn't be able to discover supersymmetry within six years.

The gambling money: **1000 USD**

The intercessor: **Max Tegmark** (MIT)

Upon 8 July 2015, it turned out that Wilczek regrettably lost the game.



Frank Wilczek

Garrett Lisi



Max Tegmark

You lost, Frank!

Example in 2016

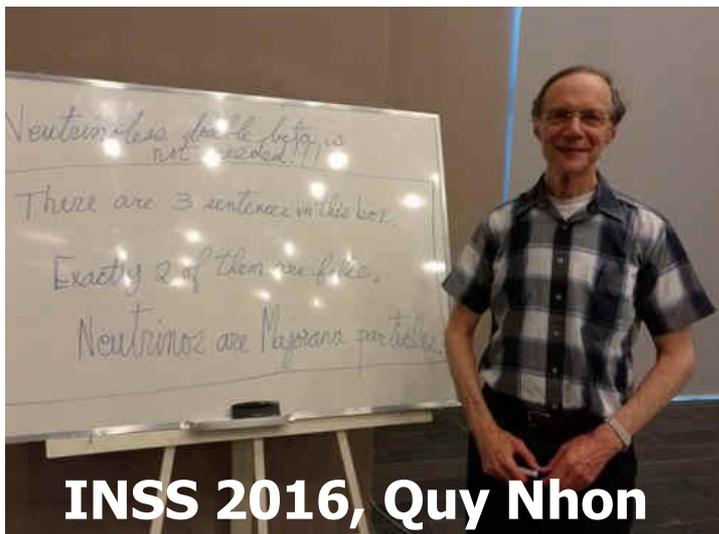
中微子专家Kayser: 搞笑, 我是认真的!  精选

2016-7-27

Boris Kayser's humor



已有 13650 次阅读 2016-7-27 09:29 | 个人分类:科普 | 系统分类:科普集锦 推荐到群组

**A. There are three sentences in this box**

在这个方框中有三句话

B. Exactly two of them are false

恰恰其中的两句话是错误的

C. Neutrinos are Majorana particles

中微子是Majorana型粒子

Let's judge in his way (we are certainly **serious** in making a joke)◆ **A** is always true!◆ If **B** were true, **A** and **C** would be false — in conflict with the fact that **A** must be true.◆ **B** should be false. Then **C** must be true, otherwise **B** and **C** would both be false, implying that **B** is actually true.◆ So we have proved **C** without doing any $0\nu 2\beta$ experiment!

2017-3-30

Humorous acknowledgments in papers or books



已有 16048 次阅读 2017-3-30 09:48 | 个人分类:科普 | 系统分类:

Example 1: A Theory of Ambulance Chasing (arXiv:1603.01204)

Mihailo Backovic (Catholic University of Louvain)

I would like to thank the SNCB Belgian Railways for providing a comfortable environment on the trains where most of this work was conducted as well as for frequent delays in the train system which provided the much needed additional time to complete the project...



Example 2: N=2 Supersymmetric Dynamics for Pedestrians (book)

Yuji Tachikawa (University of Tokyo)

The author also thanks the right amount of duties associated to his position, with which he cannot concentrate any longer on cutting-edge researches but still has some time to summarize what he already knows. In particular, he thanks various stupid faculty meetings he needs to participate, during which time he drew most of the figures on his laptop. The readers should therefore thank the overly bureaucratic system prevalent in University of Tokyo, which made this lecture note materialize.



caojun的个人博客  分享

<http://blog.sciencenet.cn/u/caojun>

中国科学院高能物理研究所八卦物理, 管窥大千

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动态

微博

博文

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好友

留言板

Neutrino blogs

中微子自选

- * 大亚湾入选十大科技突破
- * 大亚湾中微子科普专题
- * 大亚湾中微子发现的科普版
- * 大亚湾实验结果的简单解释
- * 中微子赛跑进入冲刺阶段
- * 超光速的中微子
- * 最纯净的水是蓝色的
- * T2K观察到新的中微子转换现象
- * 三人成虎
- * 2012, 中微子毁灭世界?

个人资料 **Prof. Jun Cao**



曹俊的博客

-  查看微博
-  关注TA
-  加为好友
-  给我留言
-  打个招呼
-  发送消息
-  学术名片
-  学术谱系

工作情况:

中国科学院, 高能物理研究所, 研究员

研究领域:

数理科学->物理学II->粒子物理与核

博文

Jun's preface for the Chinese version of Hitoshi Murayama's book *HIDDEN UNIVERSE*.

◆ 《隐匿的宇宙》序 2017-08-14

为日本物理学家村山齐的畅销大众科普书《隐匿的宇宙——用基本粒子揭开宇宙之谜》写的序。几千年来,“宇宙的本原”一直是哲学家们思考的主题。屈原 ...

(5657)次阅读 | (9)个评论

◆ 美国实验发现新的中微子反应 2017-08-06

假如用它来探测核反应堆产生的中微子,反应几率可比现在常用的方法提高50倍。2017年8月3日,美国COHERENT实验首次探测到中微子的相干散射过程。论文 ...

(9415)次阅读 | (10)个评论

◆ 大亚湾新结果表明“中微子反常”或因理论模型不正确 2017-06-21

6月19日,大亚湾反应堆中微子实验的论文《大亚湾反应堆中微子流强和能谱的演

COHERENT experiment

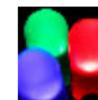
好友 **blogger friends**



邢志忠



武夷山



李铭



Jun Cao: IHEP professor, co-spokesman of the Daya Bay Collaboration
His blogs on **neutrino physics** are very timely, informative, influential



- A blogger's main motivation:**
- Publicize science and scientists
 - make himself or herself happy



Science bloggers' self-perceived communication roles

Paige Brown Jarreau (Louisiana State University, 2014)

武夷山 分享
<http://blog.sciencenet.cn/u/Wuyishan>
 中国科学技术发展战略研究院研究员；南京大学信息管理系博导

[博客首页](#) | [动态](#) | [微博](#) | [博文](#) | [相册](#) | [主题](#) | [分享](#) | [好友](#) | [留言板](#)

博文

美国学者的经验研究----谁在阅读科学博客？ 精选

已有 2429 次阅读 2018-6-26 06:19 | 个人分类:科学计量学研究 | 系统分类:观点评述

美国学者的经验研究----谁在阅读科学博客？

武夷山

*Who reads science blogs?
P.B. Jarreau (2018)*

《美国科学家》杂志网站2018年6月5 日发表美国路易斯安那州立大学大众传播学院博士后PAIGE JARREAU女士的博文，Who Reads Science Blogs?（谁在阅读科学博客）。文章说：

Prof. Yishan Wu

武夷山

查看微博 | 关注TA
 加为好友 | 给我留言
 打个招呼 | 发送消息

扫一扫，分享此博文

Blogging: pros and cons

20

You can benefit quite a lot from blogging:

- your group becomes better known;
- yourself becomes better known;
- you make interdisciplinary friends;
- publishers invite you for writing books;
- media may interview you; →
- students want you as their supervisor;
- you are invited to give public lectures;
- your alumnus and alumna may find you and want to date you... ^_^



Of course, blogging is not always a good thing. For instance,

- sometimes you cannot help to blog during working time;
- sometimes you pay too much attention to it and become emotional;
- sometimes you have to face some negative and impolite comments;
- sometimes you might become nervous in such a virtual web space;
- sometimes your privacy might be more or less released to others....

Never forget that you have been paid to be a scientist, NOT a blogger!

Sometimes it's embarrassing

21

I became known for blogging in Science Net. One of my PhD students, **Shu Luo (SL)**, once told me a true story.

After graduation she got a postdoctoral position in Xiamen University. Upon her arrival, she had a dialogue with **somebody (SB)** over there:

SB: Hi, who is your PhD supervisor at IHEP?

SL: Prof. Zhi-zhong Xing.

SB: No idea.

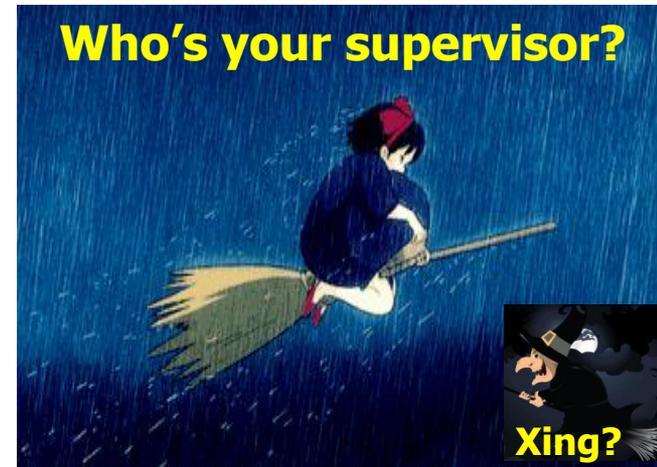
SL: He might be the MOST famous neutrino theorist in China.

SB: No idea.

SL: He is a funny blogger in Science Net.

SB: Oh, I know who he is. I love his blogs...

What could I say? It's always hard to know which cloud has rain in your life.





COLORLESS

COLORFUL

**BLOGS: a kind of prism
in my research and life**

I am pleasant / excited