

LC NEWSLINE

THE NEWSLETTER OF THE LINEAR COLLIDER COMMUNITY

DIRECTOR'S CORNER

A linear collider strategy

by Steinar Stapnes



The linear collider community met in Lausanne in April. The main points discussed concerning implementation of a linear collider as the next large international accelerator project are summarised in a document ready for download.

AROUND THE WORLD

From KEK: KEK presented its plan for the ILC project in Lausanne

by Rika Takahashi

AROUND THE WORLD

From CERN: In Granada, the European particle physics community prepares decisions for the future of the field



The European particle physics community is meeting this week in Granada, Spain, to discuss the roadmap for the future of the discipline.

AROUND THE WORLD

From Symmetry: Falsifiability and physics



Can a theory that isn't completely testable still be useful to physics?



KEK Director General Masanori Yamauchi updated KEK's activity toward the realization of the ILC in Japan.

IN THE NEWS

from *NZZ*

19 March 2019

Es gibt gute Gründe, einen Teilchenbeschleuniger für 10 Milliarden Euro zu bauen. Doch die Physiker leisten zu wenig Überzeugungsarbeit

Einen Teilchenbeschleuniger zu bauen, der noch grösser ist als der Large Hadron Collider am Cern, ist nicht abwegig. Bis anhin tun die Physiker aber noch viel zu wenig, um die Öffentlichkeit davon zu überzeugen. (Building a particle accelerator even bigger than the Large Hadron Collider on Cern is not out of the question. Until now, however, the physicists are still doing too little to convince the public.)

from *Clubic*

12 May 2019

Tout savoir sur le Futur Collisionneur Circulaire (CERN)

Si les projets post-LHC dont nous allons détailler les enjeux au fil de ces lignes, nous laissent entrevoir de nouvelles découvertes dans les prochaines décennies, la Chine et le Japon sont eux aussi dans les starting blocks. (If the post-LHC projects that we will detail the issues along these lines, let us see new discoveries in the coming decades, China and Japan are also in the starting blocks.)

from *EXPRESS*

9 May 2019

When antimatter and matter collide: New CLIC collider will unravel secrets of the universe

PARTICLE physicists at the European Organisation for Nuclear Research (CERN) want to unravel the secrets of the infant universe by colliding together supercharged particles of matter and antimatter inside a machine called CLIC.

from *Sankei News*

1 May 2019

令和は、こうなる」 各分野の有識者ら4人に聞く

■「宇宙の謎、次々と明かされる」 人気漫画「島耕作シリーズ」で知られる漫画家の弘兼憲史（ひろかね・けんし）氏
「東京五輪、大阪万博と大イベントが続き、その後の国家プログラムとして期待されるのが、東北地方に建設構想を進めている次世代加速器「ILC」だ。令和の時代は宇宙の謎が次々と明かされていくだろう。(■ “Mystery of the Universe is revealed one after another” Mr. Hirokane Kenshi, a manga artist known for the popular manga “The Island Kosaku Series”
“The Tokyo Olympics, Osaka Expo— major events will follow, and expected future national program will be the next generation accelerator” ILC , being planned to build in Tohoku region The mystery of the universe will be revealed one after another in the era of Reiwa.)

from *hindustantimes*

14 April 2019

The science of equality: Women scientists are battling odds to reach the top

At the time, we had no idea whether such a collider could be built but it affected the way next generation colliders were planned.”
The International Linear Collider may take off in Japan in the next decade.

from *Indicator.ru*

5 April 2019

Мартовский астрообзор: ранняя Вселенная, вращение черных дыр и радиопульсары

Всех интересует, что будет после Большого адронного коллайдера. Один из ответов: Большой линейный электрон-позитронный коллайдер (ILC — International Linear Collider). (Everyone is wondering what will happen after the Large Hadron Collider. One answer: The Large Linear Electron-Positron Collider (ILC – International Linear Collider).)

from *Sankei News*

3 April 2019

次世代加速器 I L C、各国に費用分担を提案へ 高エネ研が検討部会

ILCについて、推進側の中心機関である高エネルギー加速器研究機構は3日、最大の課題である巨額費用について検討し、分担の考え方を各国政府に提案する国際作業部会を同機構内に設置することを明らかにした。(KEK, which plays central role for promoting the ILC, will set up an International Working Group within the organization, to discuss the huge cost (the biggest problem) and propose the concept of sharing to each possible partner government.)

from *Iwate Nippo*

28 March 2019

若き熱意、ILC実現の力に 一関一高卒の2人、署名提出

一関一高卒の浅利寛喜（ひろのぶ）さん（岩手医大2年）と金野（このの）遼大さん（東北大2年）は28日、東京都千代田区の文部科学省で柴山昌彦文科相へ国際リニアコライダー（ILC）の実現を願う署名5664人を提出し、誘致への熱意を伝えた。(Hiroki Asari and Ichino Kano, two of Ichinoseki Daiichi High School graduates handed 5,664 signatures they collected to Masahiko Hayama, Minister of MEXT, showing the enthusiasm to invite the ILC.)

from *Iwate Nippo*

28 March 2019

ILC、政府見解は「前進」 エバンスLCC代表インタビュー

(LCC) のリン・エバンス代表（英国）は27日、岩手日報社の単独インタビューに答え、文部科学省が7日表明した政府見解について「（実現へ）前進した」との見方を示した。中国で検討が進む大型加速器構想について「一番の脅威」と説明。ILC実現に向けて日本政府に対し、年内に一層踏み込んだ態度を示すよう強く求めた。(LCC Director Lyn Evans stated responding to the government's view

expressed by MEXT, that he see it as an “advancement to the realization of the ILC” He explained that “largest threat” would be the large accelerator concept that is being studied in China. He urged the Japanese government to show a positive attitude towards the realization of ILC by the end of the year.)

from Kahoku Shinpo

22 March 2019

[〈 I L C 〉計画の早期実現改めて国に要望 国際研究者組織が声明](#)

超大型加速器「国際リニアコライダー（ I L C ）」を推進する研究者組織の国際将来加速器委員会（ I C F A ）は 2 2 日、当面は誘致しない方針を示した文部科学省の見解に対し、計画の早期実現を改めて求める声明を発表した。（ICFA released the statement in response to the view of MEXT, asking for early realization of the plan.）

PREPRINTS

ARXIV PREPRINTS

[1905.00220](#)

Complementarity between ILC250 and ILC-GigaZ

[1904.10156](#)

Gauge-Higgs unification at e+e- linear colliders

[1904.07407](#)

Minimal Dirac Neutrino Mass Models from U(1)R Gauge Symmetry and Left-Right Asymmetry at Collider

[1903.12327](#)

Higgs to π analysis in the future e+e- Higgs factories

[1903.11661](#)

A 96 GeV Higgs Boson in the N2HDM

[1903.10262](#)

ARRAY: An Open Source, Modular and Probe-Card based System with Integrated Switching Matrix for Characterisation of Large Area Silicon Pad Sensors

[1903.09405](#)

A 15-MW Proton Driver for Neutrino Oscillation Experiments