

ECFA

European Committee for Future Accelerators



Report of the ECFA Chairperson

Jorgen D'Hondt (Jorgen.DHondt@cern.ch)

PECFA meeting, July 20th, 2018, ALBA, Spain



Some highlights in the accelerator world
with links to presentations at ICHEP 2018, Seoul, Korea

MICE – Muon Ionization Cooling Experiment @ RAL

(from <https://indico.cern.ch/event/686555/contributions/2962529/>)
 (also in CERN Courier, <https://cerncourier.com/muons-cooled-for-action/>)

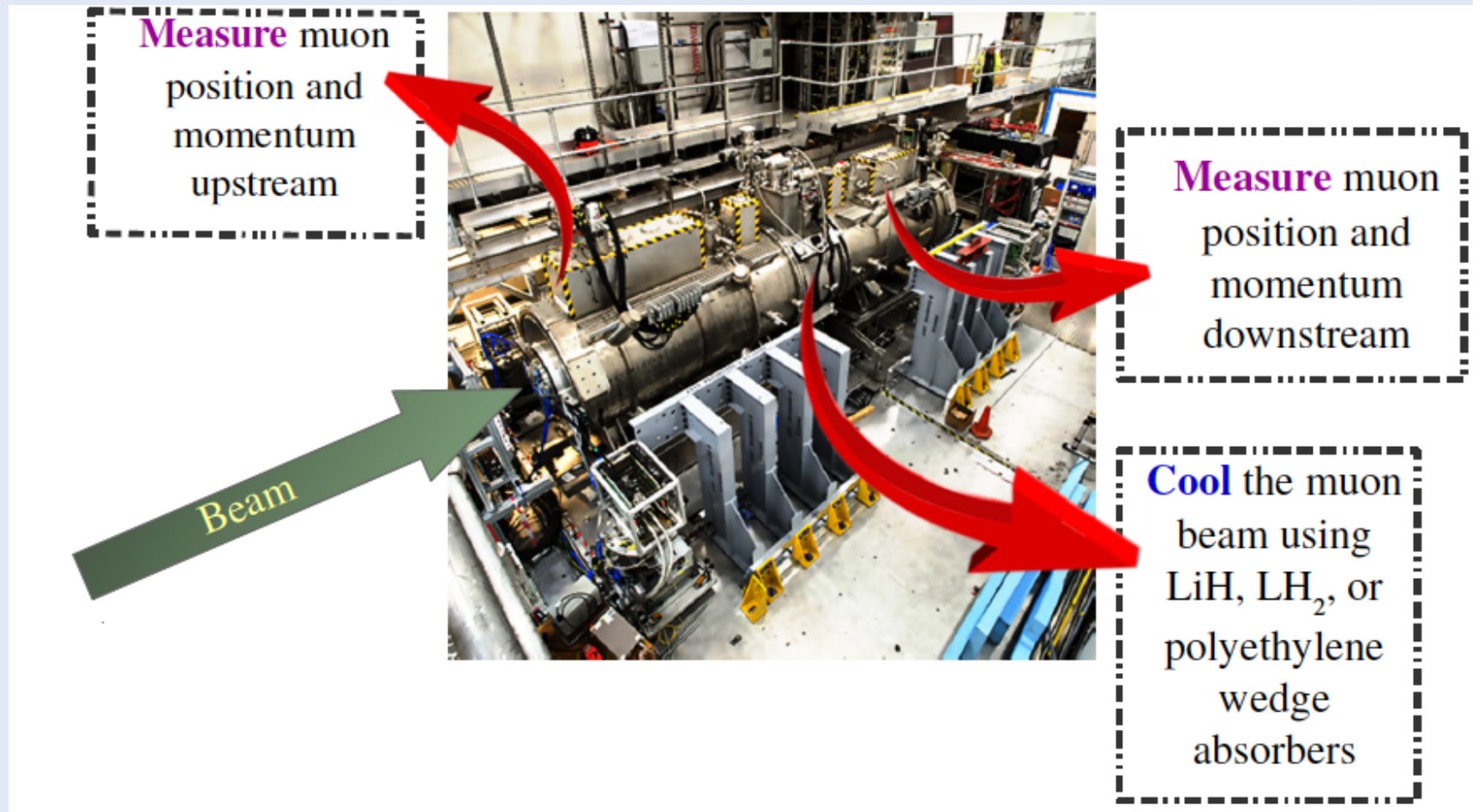
- Aim to demonstrate ionization cooling principle by observing an increased inherent beam brightness, operational at the ISIS synchrotron at RAL since 2008.
- ① Muons lose longitudinal and transverse momentum through ionization energy loss in an absorber.



- ② Multiple scattering degrades the cooling effect, but mitigated by low-Z absorber and tight focusing.
- ③ Muons regain only longitudinal momentum in RF cavities.

MICE – Muon Ionization Cooling Experiment @ RAL

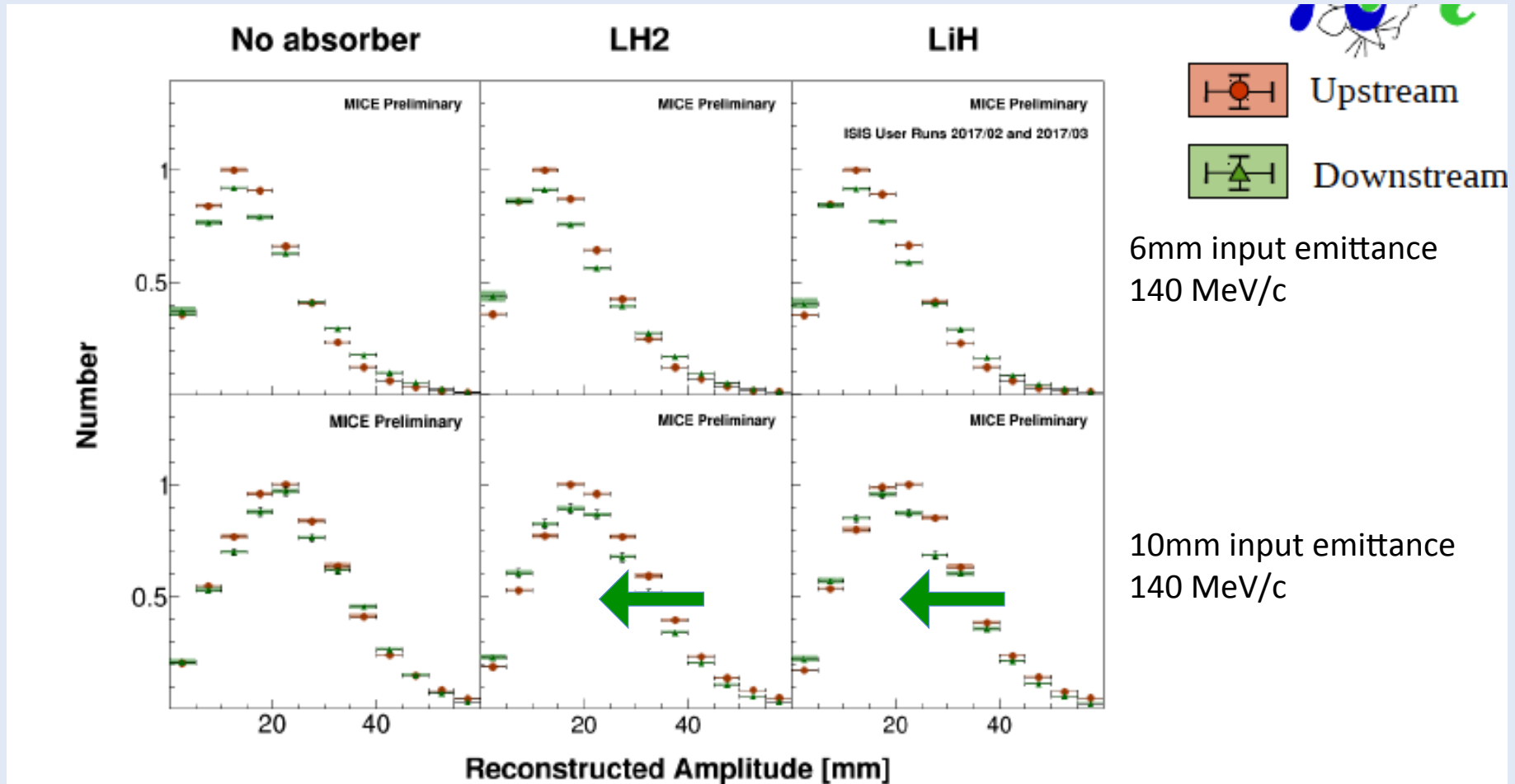
(from <https://indico.cern.ch/event/686555/contributions/2962529/>)





MICE – Muon Ionization Cooling Experiment @ RAL

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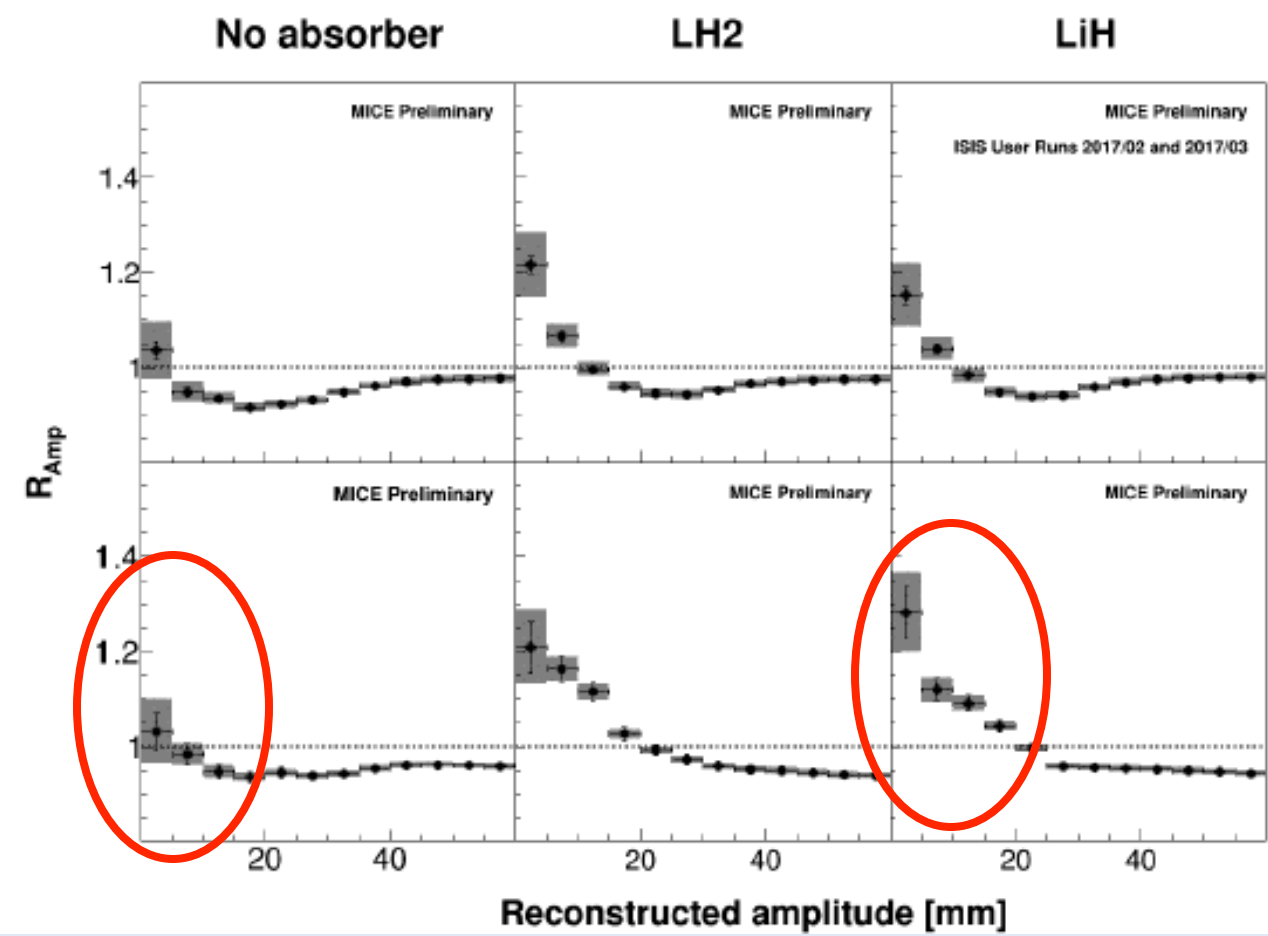




MICE – Muon Ionization Cooling Experiment @ RAL

(from <https://indico.cern.ch/event/686555/contributions/2962529/>)

Ratio of distributions



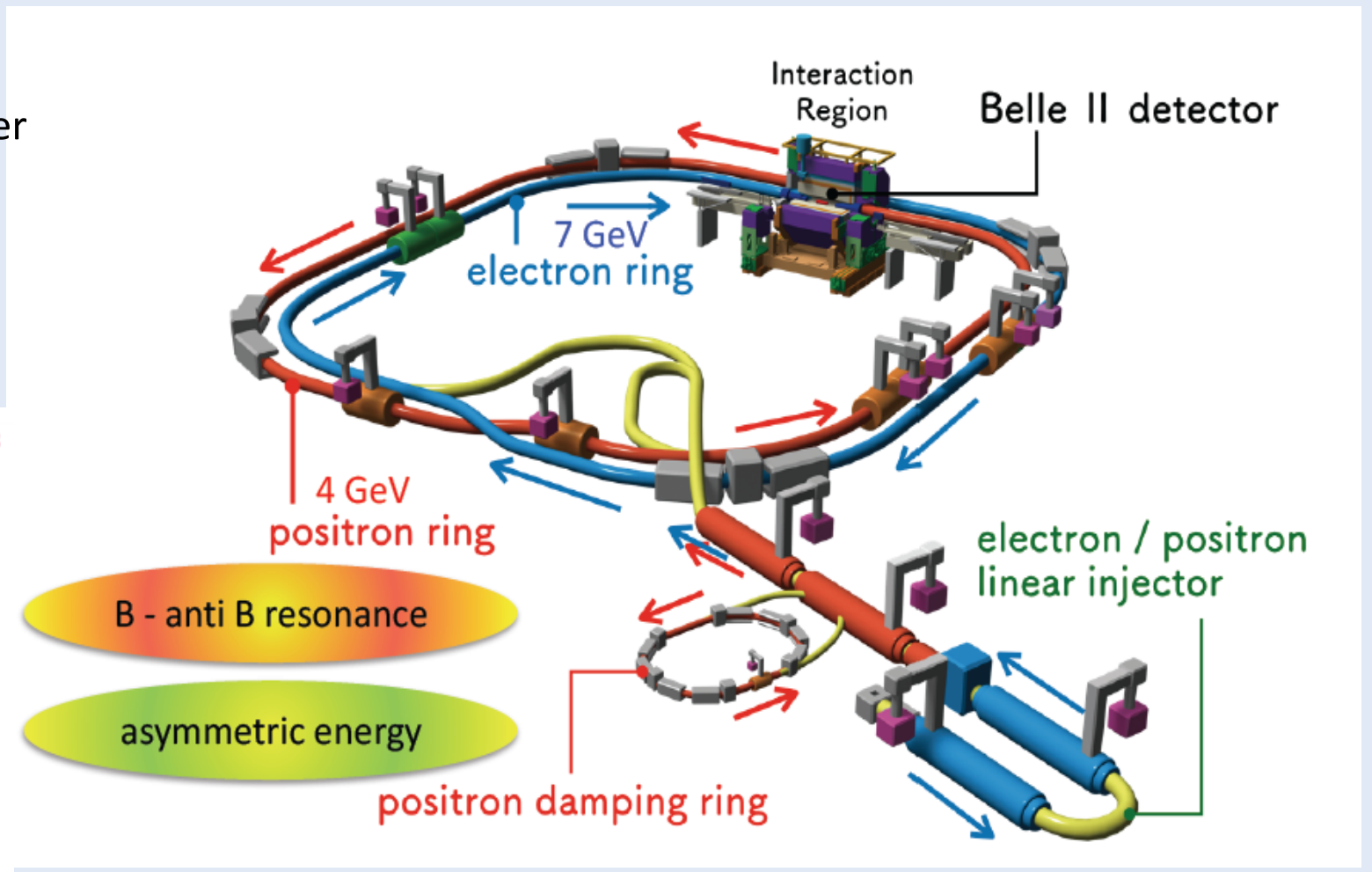
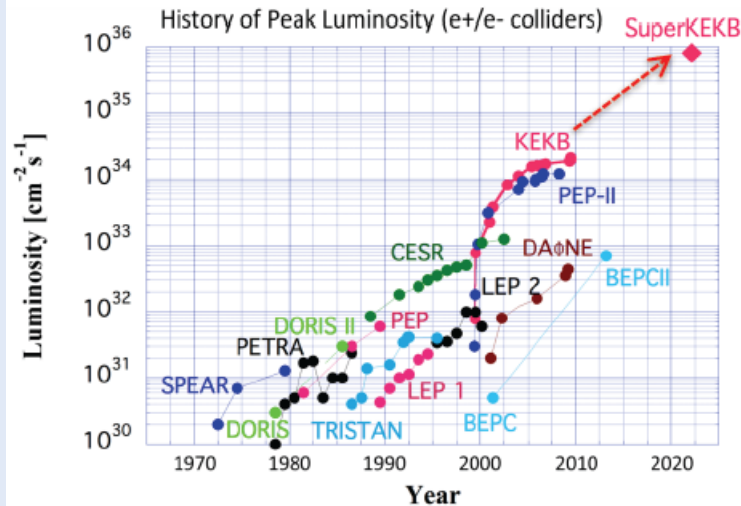
6mm input emittance
140 MeV/c

10mm input emittance
140 MeV/c

SuperKEKB and BELLE-II started

(from https://indico.cern.ch/event/686555/contributions/3028068/attachments/1683219/2705296/3-2_ICHEP18_SuperKEKB_Akai.pdf)

- Started physics run in 2018
- Pioneering the luminosity frontier
- Nano-beam collider scheme
- First collisions on April 26, 2018
- First “re-discoveries” made of beauty and charm



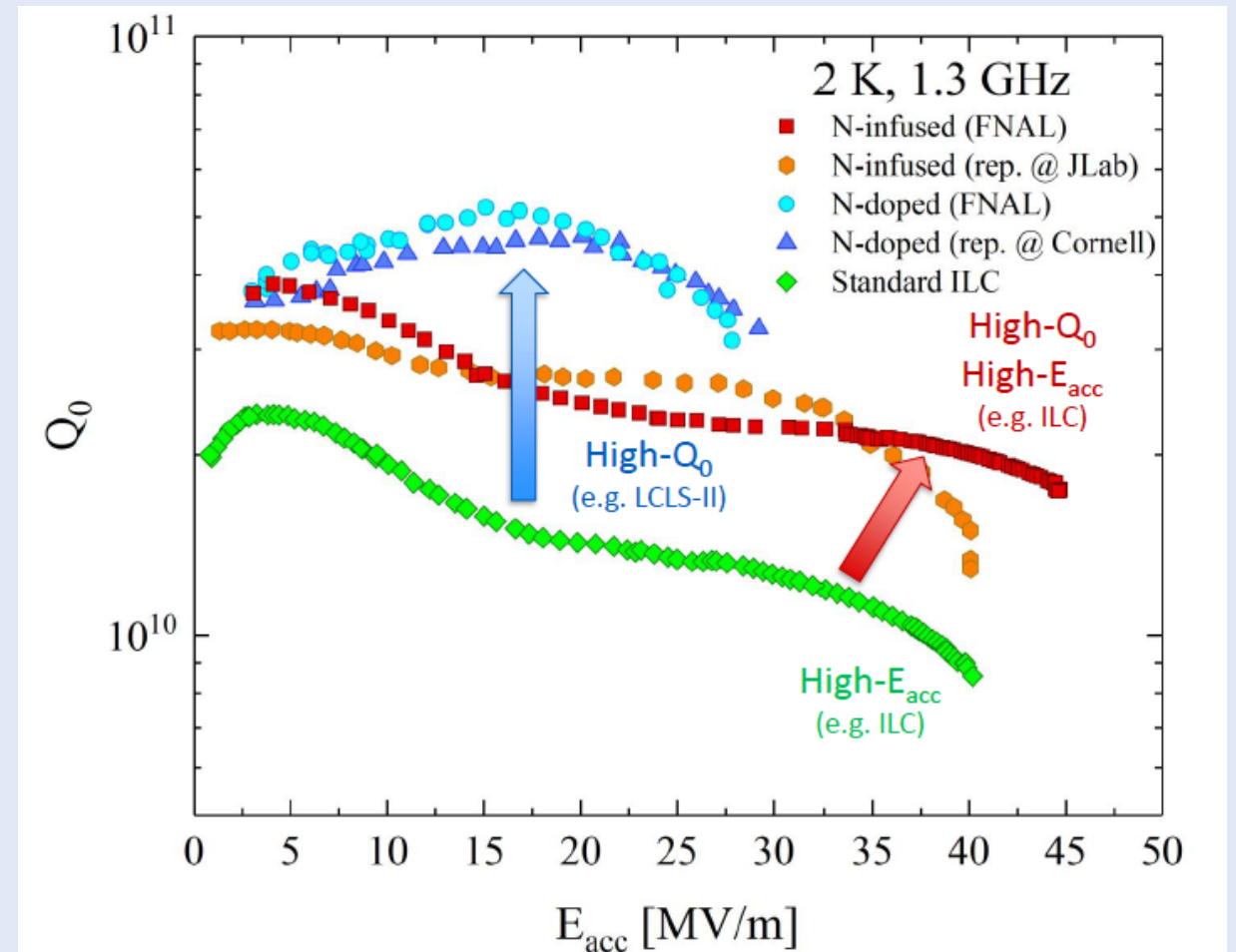


R&D for Superconducting RF cavities

(from <https://indico.cern.ch/event/686555/contributions/2962536/>)

- Need a high Q-factor (Q_0) related to the cavity achievable efficiency.
- Increase the accelerator gradient (E_{acc}).
- Both are related to cost reduction avenues for linear colliders.
- The process of Nitrogen doping of the Nb cavities combined with 120 C baking increases the Q-factor.
- Important progress in the field.

(ILC TDR mentions a 31.5 MV/m gradient)
<https://arxiv.org/pdf/1306.6327.pdf>)

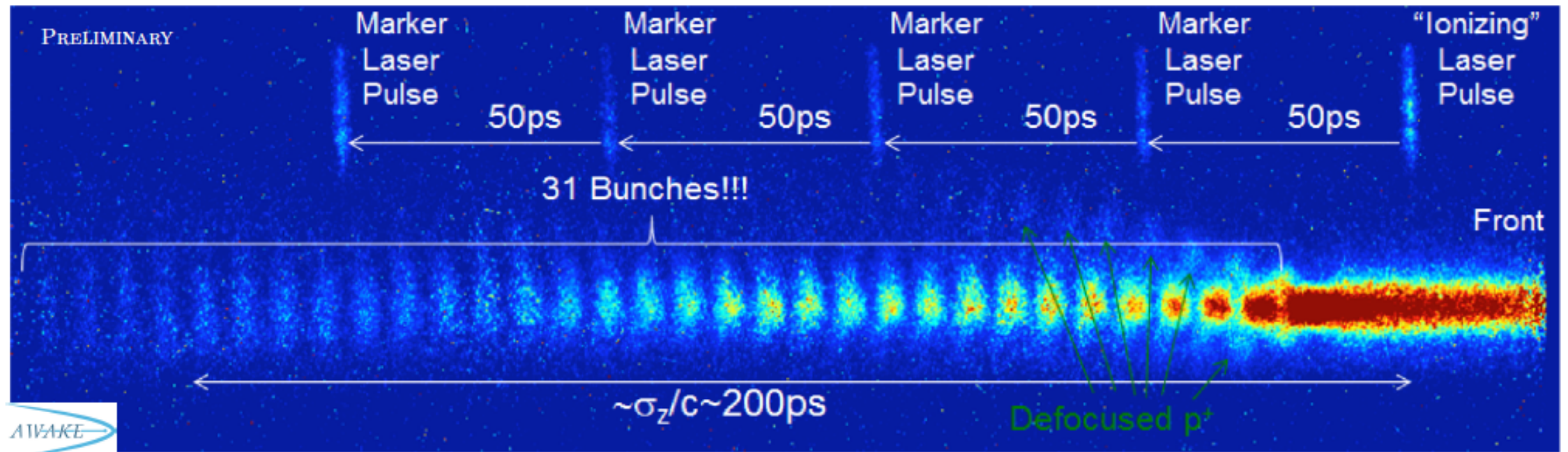




The AWAKE experiment @ CERN

(from <https://indico.cern.ch/event/686555/contributions/2962550/>)

AWAKE aims to demonstrate proton driven plasma wakefield acceleration for the first time.

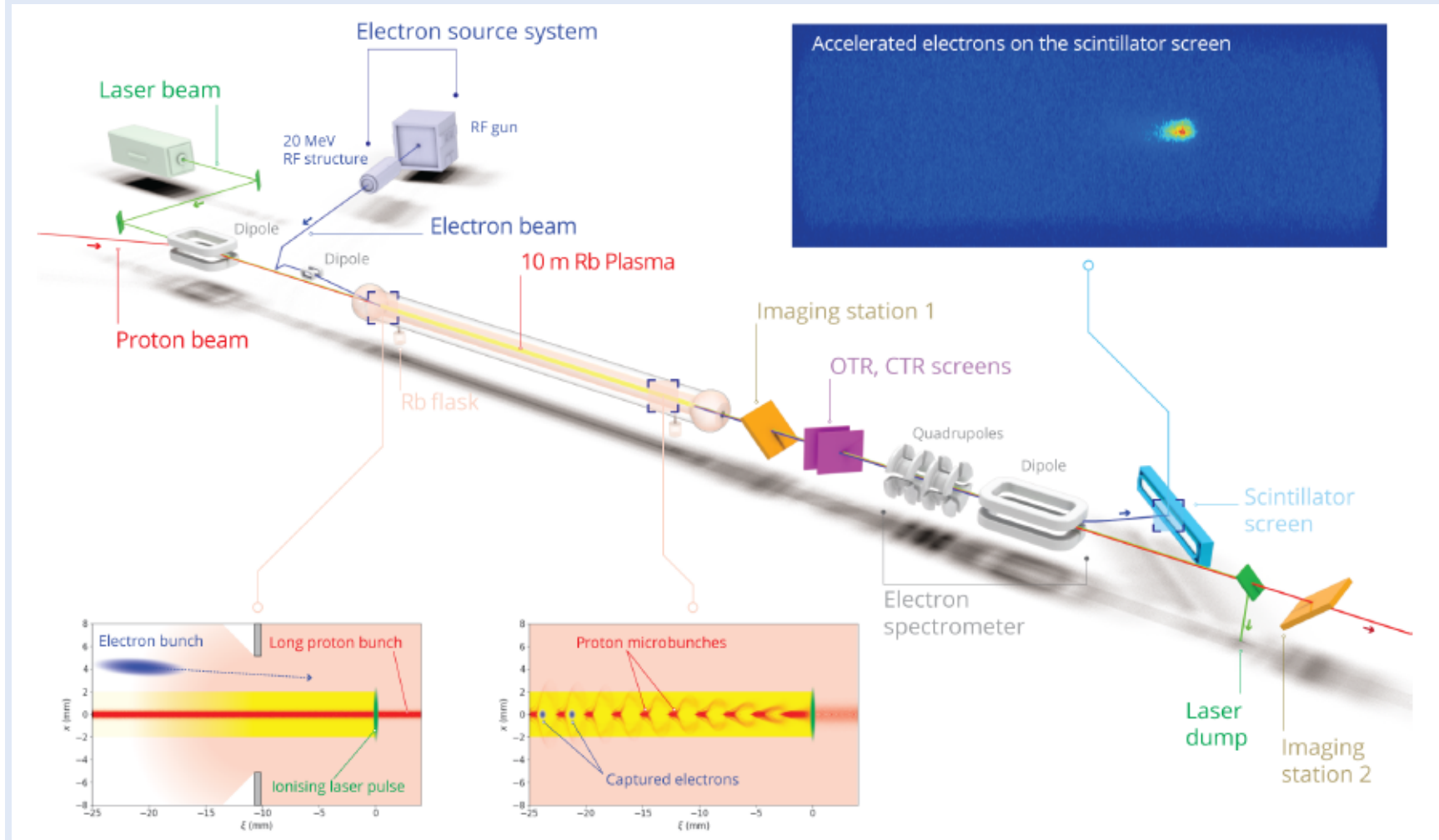


Stitching together **multiple** streak camera images shows the full bunch train.

This is only possible because of how **reproducible** the self-modulation is.

The AWAKE experiment @ CERN

(from <https://indico.cern.ch/event/686555/contributions/2962550/>)



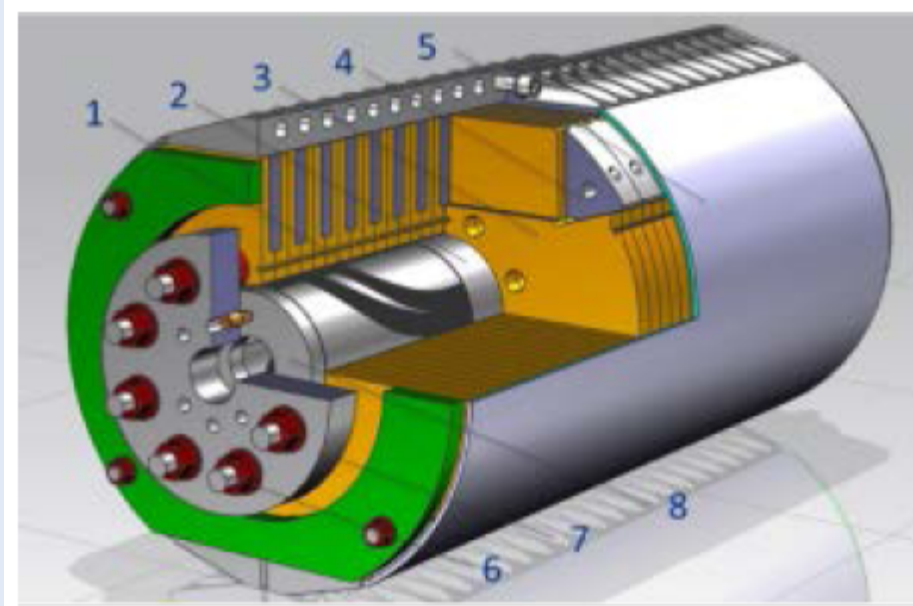
- Using the CERN SPS proton beam.
- For the first time acceleration of electrons up to 2 GeV has been observed using this plasma wakefield acceleration technique.
- The reproducibility is promising.
- Only the start...

R&D on High-field magnets

(from <https://indico.cern.ch/event/686555/contributions/2962534/>)

- Presently there is no viable alternative, development of the Nb₃Sn magnet technology is crucial for the future hadron collider where 12-20 T fields are essential.
- The current density achieved in the state of the art Nb₃Sn materials is adequate for reaching the fields up to 20 T, however the stress/strain tolerances are not.
- The main technical challenge for a >16 T dipole magnet is the structural integrity of the coil.

15 T Nb₃Sn dipole fabrication at FNAL and will be tested later this year.

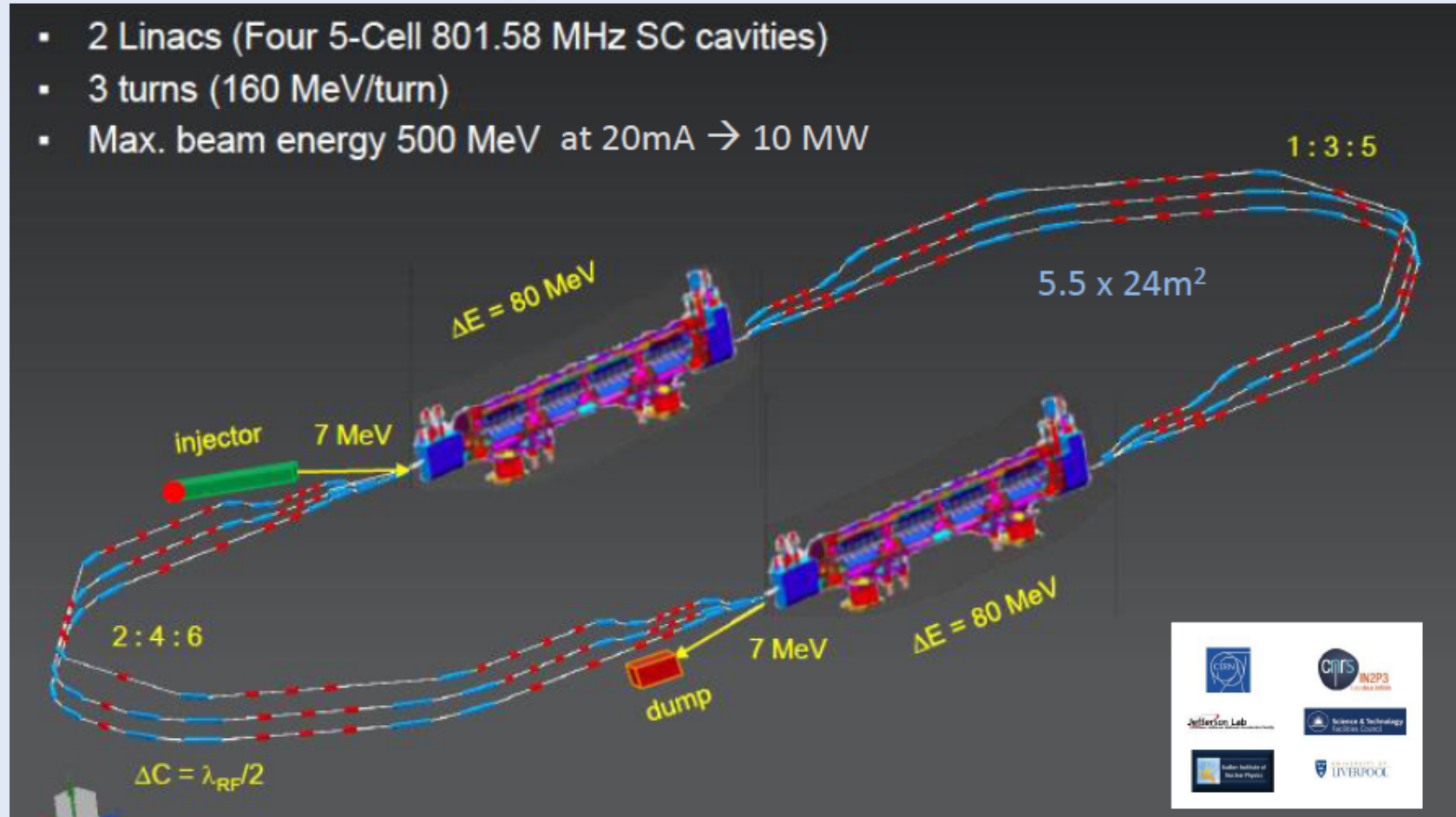


Energy Recovery Linac (ERL) – PERLE @ Orsay CDR (J.Phys. G45 (2018) no.6, 065003)

(from <https://indico.cern.ch/event/686555/contributions/2962555/>)

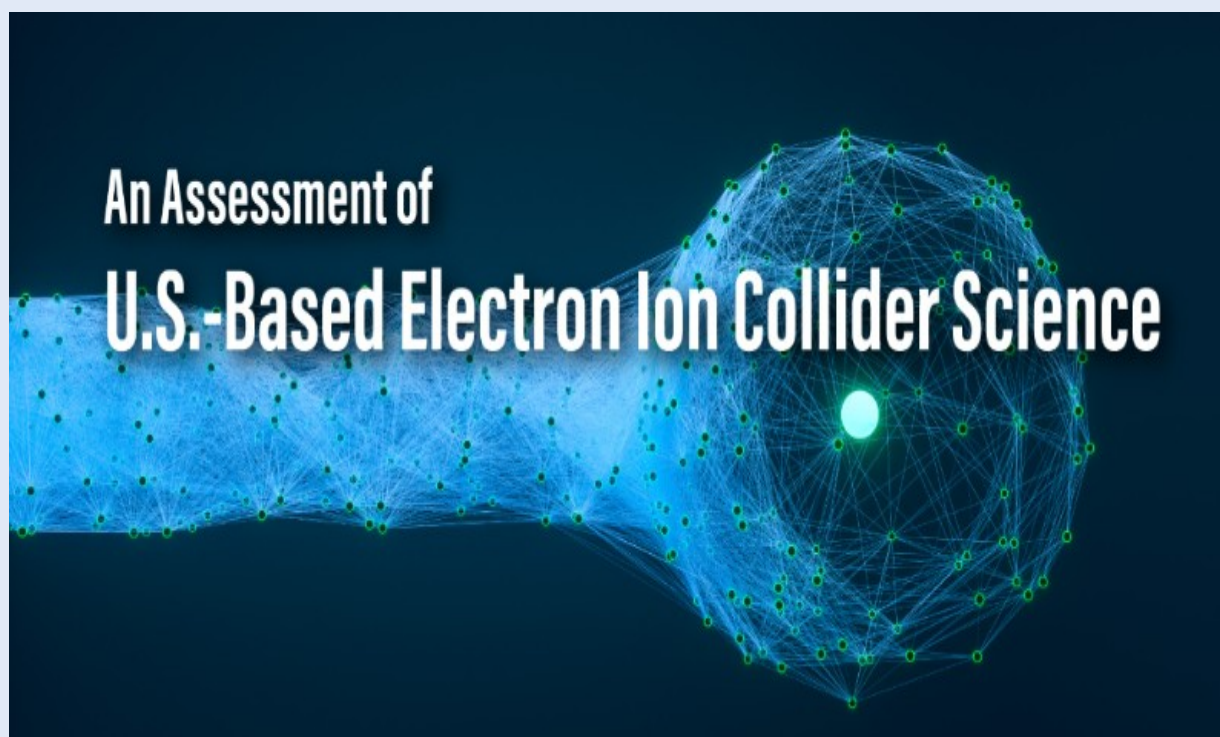
A first SC cavity of 802 MHz frequency has been built (J-LAB) and tested showing stability up to 29 MV/m and a weak Q_0 -gradient dependence around $3 \cdot 10^{10}$, exceeding the design goal.

Depending on the phase electrons pass the SC cavities, they are accelerated (increase the kinetic energy using the RF field) or decelerated (use the kinetic energy to increase the RF field).



U.S.-Based Electron Ion Collider Science – report release webinar

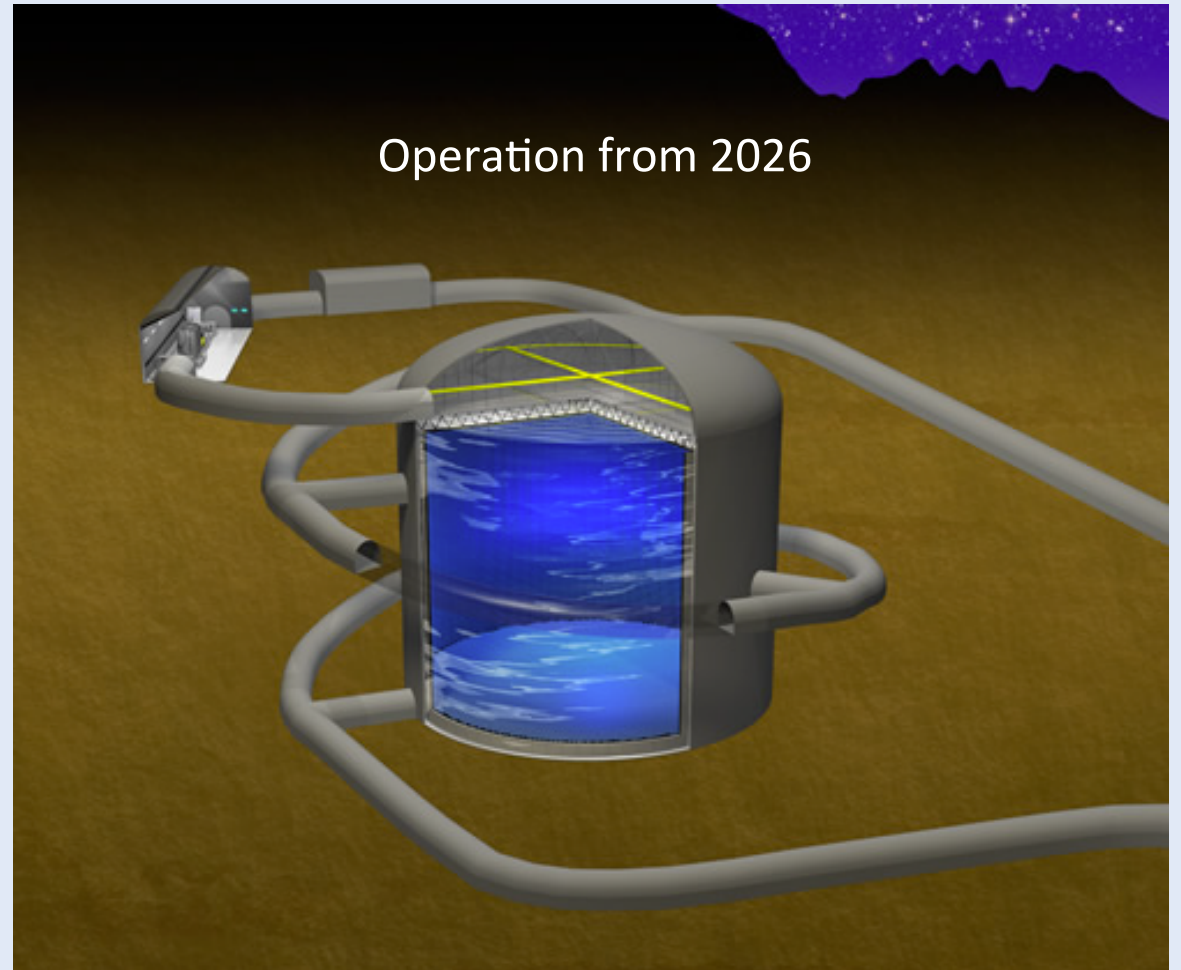
(Webinar registration link: <http://eicollider.eventbrite.com>)



As the U.S. and the DOE evaluate options for constructing the next large collider facility in an attempt to probe the nature of matter, the National Academies of Sciences, Engineering, and Medicine were asked to identify how a new electron ion collider facility would benefit U.S. scientific leadership in nuclear science and the U.S. workforce. We invite you to join us for the report release webinar on **July 24, 2018 at 1pm ET** to hear about the report's findings from study committee members followed by a question and answer session with webinar participants.

Hyper-Kamiokande – Design Report (<https://arxiv.org/pdf/1805.04163.pdf>)

- Largest water Cherenkov detector in the world.
- To be hosted in a new cavern in the Tochibora mine 295 km from J-PARC (upgraded proton accelerator with MW beam).
- Near detectors between 280 m and 1-2 km from the neutrino target.
- New photo-sensors (faster and higher quantum efficiency).
- High precision for leptonic CP violation related to the baryon asymmetry in the universe.
- Significant improvement for proton/nucleon decay measurements.
- Neutrino mass ordering.
- Astroparticle physics (indirect dark matter).



For the Plenary ECFA meeting at CERN (Nov 15-16, 2018) *“Comprehensive overview of Future Collider Projects” – strawman proposal*

Thursday

Thursday morning (9:00-12:00): RECFA

Thursday afternoon (13:30-16:00): standing items

Thursday afternoon (2nd part):

Topic	Time (incl discussion)
Technology	
RF Acceleration	30 min / TH 16:00
High Field Magnets	30 min / TH 16:30
Plasma acceleration (incl ALEGRO)	30 min / TH 17:00
Other issues	
Accelerator schools	20 min / TH 17:30
Accelerators for society	20 min / TH 17:50

Friday

Hadron Colliders	
HL-LHC	30 min / FR 9:00
HE-LHC	30 min / FR 9:30
FCC-hh (CPPC?)	30 min / FR 10:00
Ion Colliders	
Ion and ion-electron colliders	30 min / FR 11:00
Hadron-Lepton Colliders	
LHeC/FCC-eh (incl PERLE)	30 min / FR 11:30
Lepton Colliders	
Colliders for b/c/tau production	30 min / FR 12:00
Muon colliders (incl MICE)	30 min / FR 13:30
CEPC	30 min / FR 14:00
FCC-ee	30 min / FR 14:30
ILC	30 min / FR 15:30
CLIC	30 min / FR 16:00
END	16:30

For the Plenary ECFA meeting at CERN (Nov 15-16, 2018)
“Comprehensive overview of Future Collider Projects” – strawman proposal

Thursday

Hadron Colliders

Friday

**A small working group will assist the ECFA chairperson in the organisation of this meeting:
 Tadeusz Lesiak (Poland), Lenny Rivkin (Switzerland),
 Guy Wormser (France), Roger Forty (CERN)**

RF Acceleration	30 min / TH 16:00
High Field Magnets	30 min / TH 16:30
Plasma acceleration (incl ALEGRO)	30 min / TH 17:00
Other issues	
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Lepton Colliders	
Colliders for b/c/tau production	30 min / FR 12:00
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CEPC	30 min / FR 14:00
FCC-ee	30 min / FR 14:30
ILC	30 min / FR 15:30
CLIC	30 min / FR 16:00
END	16:30



RECFA country visits 2018 & 2019

- The following visits and meetings are foreseen in 2018
 - *Romania (Bucharest), March 23-24, 2018*
 - *Austria (Vienna), April 6-7, 2018*
 - *Slovakia (Bratislava), May 18-19, 2018*
 - **ALBA (Barcelona), July 19-20, 2018 (including PECFA and RECFA meetings)**
 - The Netherlands (Amsterdam), October 19-20, 2018
 - CERN, November 15-16, 2018 (including PECFA and RECFA meetings)
- The following country visits in 2019 (too early to settle on the dates):
 - Spring RECFA visits: Spain-Slovenia-Poland
 - Summer RECFA and PECFA: at the EPS-HEPP meeting in Ghent, Belgium
 - Fall RECFA visit: Cyprus
 - Fall RECFA and PECFA: CERN



RECFA visits to countries

Following the visits recommendations are formulated in letters from ECFA to the policy makers in the country are available on the ECFA website (<https://ecfa.web.cern.ch/content/letters-member-states>). New since 2018 is that an **executive summary** complements the typical letter where we elaborate.

RECFA visit to Romania

(<http://www.nipne.ro/indico/conferenceDisplay.py?ovw=True&confId=358>)

Thank you
Calin Alexa,
Florin-Dorian
Buzatu and team



RECFA visit to Romania – executive summary

- The committee recognises and is impressed by the significant contributions of researchers at Romanian universities and national R&D institutes to the international field of particle physics.
- The committee greatly appreciates the establishment of the International Scientific Advisory Board with a mandate to help steer the research community.
- The committee recommends that the government re-establish stable annual financial support so that particle physics researchers can continue to compete internationally, with commitments generally based on long-term planning.
- The committee recommends that the relevant entities in Romania take all necessary steps towards research-based learning and training by exploring synergies between universities and research institutions.
- Based on their initial success, the committee recommends sustaining and potentially strengthening the support for industry liaison efforts between CERN and Romania.
- The committee recommends strengthening advanced education in particle physics so that new young talents can emerge, and defining steps to increase the number of physics teachers.
- The committee looks forward to ELI-NP becoming a fully operational research facility according to the traditional high standards of such institutions in Europe.

RECFA visit to Austria (<https://indico.cern.ch/event/689498/overview>)

Thank you Manfred Jeitler and team





RECFA visit to Austria – executive summary

- The committee recognises the excellent achievements of researchers from Austrian institutions in the global particle physics community, both in the development of technology and in physics analyses. The fact that there is only one professor in experimental particle physics in the country is, however, an issue to address.
- The recently created Dark Matter research group is an excellent initiative with great potential, and we encourage you to sustain this.
- To sustain an innovation driven market, a matching investment in fundamental research should be aimed for.
- We encourage policy makers to create a programme for “big science” and “medium size” research projects, with transparent and international peer-review procedures. A national roadmap for large research infrastructures would provide support for these programmes.
- We note that the time is ripe for the scientific community and policy makers to start discussions to bring together researchers in the Vienna area at a central venue with adequate facilities.
- We sincerely congratulate the Austrian particle physics community on its impressively broad, exemplary and innovative outreach activities.

RECFA visit to Slovakia (<https://indico.cern.ch/event/711794/>)**62 participants – in the absence of a picture, I share a memory**

Thank you
Pavol Strizenec
and team



Duck at
Slovenský Grob

The story of a goose or from the yard to your table

The journey of a goose to your table is a long one. Once upon a time, when they still had a lot of still water in Slovenský Grob, it was paradise. Geese were kept in every yard, but in the 1960s, Water Buildings drained the Šúrsky water channel and the water disappeared. The ideal conditions for keeping geese were gone, unlike the demand. Mrs. Kisslingová recalls travelling with her parents and siblings when she was a child to Southern Slovakia looking for geese. Fortunately, their expeditions have been successful and today, more than 40 families provide her family business with geese and have been doing so since 1976. The construction of Pivnica u Zlatej Husi took considerable effort. We are convinced of this by the luxurious, spacious interiors as well as the wine bar that offers the best wines that satisfy even the most demanding customers. There are about 270 varieties on offer, mostly Slovak brands. However, delicious foreign wines and rare vintages are also on offer.

RECFA visit to Slovakia – executive summary (preliminary)

- The committee confirms that the Slovak research community is making adequate use of the opportunities provided by CERN, notably through its participation in several experiments.
- In this context, the time is ripe to confirm Slovak core investments in the upgrade of the ATLAS experiment, in particular.
- The committee encourages the creation of additional funding programmes based on scientific excellence to support researchers in their pursuit of innovative ambitions.
- The committee recommends initiating a dialogue between funding bodies and researchers to establish an adequate and sustainable level of technical and computing personnel to support the research.
- The successes of the industry liaison and outreach efforts are to be applauded and the committee advises Slovakia to explore ways of using these accomplishments to strengthen science education as a whole in Slovakia.
- The committee feels that the Slovak particle physics community should become more international and suggests that postdoctoral mobility programmes be created as an avenue to tenured positions.



Relations between ECFA and NuPECC

(NuPECC, Nuclear Physics European Collaboration Committee, <http://www.nupecc.org>)

- RECFA approved the **NuPECC Chairperson to become Observer to RECFA** (similar to ApPEC).
- The NuPECC Chairperson (or Deputy) participated in our previous RECFA country visits and meetings, and this is considered a clear added value.
- Similarly the ECFA Chairperson becomes Observer to NuPECC, and participated already in the NuPECC meeting in Oslo on June 15-16, 2018.
- **I ask the endorsement from Plenary ECFA.**

ApPEC-ECFA-NuPECC – Diversity Charter

(ApPEC, Astroparticle Physics European Consortium, <http://www.appec.org>)

- Diversity is an important aspect for all organisations, also in the scientific organisations and collaborations of our community.
- Diversity charters can help in promoting diversity actions in a coherent way across a community. For example inviting the scientific collaborations and/or laboratories within our field to sign such a charter.
- Signing a diversity charter would commit the signatory entity to engage in a typically long-term process of actively encouraging diversity within the structures of the collaboration/laboratory.
- A joint working group among ApPEC+ECFA+NuPECC is created to explore this avenue.
- The ECFA members in that working group are: Patricia Conde Muino (Portugal) and Stewart Boogert (UK)
- **I ask the endorsement from Plenary ECFA.**

ApPEC-ECFA-NuPECC – Joint Seminar

- NuPECC and ApPEC have many elements in common with ECFA, i.e. scientifically, technically and in the organisation of our research.
- Organising a joint ApPEC+ECFA+NuPECC seminar every three years might be a wishful option, very similar to the triennial ICFA seminars with a focus on particle physics.
- To overview the scientific and technical achievement and upcoming challenges, as well as potential synergies, and the organisational, outreach and valorisation aspects.
- A joint working group among ApPEC+ECFA+NuPECC is created to explore this avenue.
- The RECFAs members in that working group are: C. Lacasta (secretary ECFA, Valencia, Spain) and J. D’Hondt (chairperson ECFA, Brussels, Belgium)
- **I ask the endorsement from Plenary ECFA.**

ApPEC-ECFA Working Group on Detector R&D

“A committee to review detector development efforts for future projects”

<https://cds.cern.ch/record/2235340/files/Statement%20R&D298.pdf>

- The mandate of the Detector R&D panel (ECFA/16/298, June 2016), some extracts:
- **The ECFA Detector Panel is aimed at providing advice on detector development efforts for projects in their preliminary and preparatory phases.** It receives R&D proposals on request by research communities, laboratories, institutions, individual authors and bodies such as science funding agencies. It appoints experts charged to evaluate them and make recommendations.
- **It helps to create coherence of global detector R&D efforts** by encouraging synergies between different activities and advising funding agencies on request.
- It is primarily concerned with large projects, related to accelerator and non-accelerator experiments in the fields of particle and astroparticle physics, involving several institutions and requiring significant resources. It is in particular intended for the review of projects that do not undergo an existing review process elsewhere.
- **The Panel has only a reviewing and advisory role.** It does not assume any coordination of the R&D programs, nor does it take part in any science policy decisions.

ApPEC-ECFA Working Group on Detector R&D

Composition and Terms

- The Panel consists of a small number of members, including a Chair and a Scientific Secretary, appointed by ECFA in consultation with APPEC and endorsed by ECFA.
- The term of the Panel is two years. Panel members may be reappointed.

- The current composition of the panel (contact: ecfa-dp@desy.de):
 - Phil Allport
 - Ariella Cattai
 - Silvia Dalla Torre
 - *Doris Eckstein (DESY, newly added expert in Silicon tracking systems, was previously acting as the scientific secretary of the panel, and **today I ask your endorsement to add her to the panel**)*
 - Els Koffeman (chairperson)
 - Lucie Linssen
 - Laurent Serin
 - Arno Straessner
- Although she is currently not available due to illness, the committee informed me they would continue with Els as chairperson.

ApPEC-ECFA Working Group on Detector R&D – survey

- A survey is prepared by the panel with the aim to provide input to the process of updating the European Strategy for Particle Physics.
- The survey will contribute to assessing the deployment and strength of R&D activities in astro-particle, neutrino, nuclear and particle physics in Europe. It will also aim to elucidate opportunities created by current and emerging technologies and the potential for greater synergies between R&D activities.
- The questionnaire contains about 25 questions related to Detector R&D, and should take about 15-20 minutes to complete. Also by researchers not active in Detector R&D.
- You will receive (or have received) a template message to be used by you to encourage all members of your community to complete this important survey.
- **I ask ECFA members to encourage your whole community, young and senior, to fill this survey.**

ApPEC-ECFA Working Group on Detector R&D – Survey

As part of the process to inform the ongoing Update of the European Strategy for Particle Physics, the ECFA Detector Panel (<https://ecfa-dp.desy.de/>) would like to ask you to advertise as widely as possible the brief questionnaire at <https://www.surveymonkey.com/r/DetectorsRD> .

We will compile results from this survey, as part of our submission to the Physics Preparatory Group by Autumn 2018, to help structure the discussion around the perceived status, attitudes and challenges relating to European particle physics detector R&D. Given the interdisciplinary nature of such activities and the global connectivity of particle physics research, we would welcome as broad a response as possible, but our aim will ultimately be to draw conclusions most relevant to strategy planning for European Particle Physics.

The survey solicits input from physicists and engineers, from master students to senior researchers, involved in astro-particle, neutrino, nuclear and particle physics activities in Europe.

We do not exclusively address the survey to detector R&D experts. We also would like to get a few of the questions answered by non-detector experts, in order to get input on why they are not engaging in this aspect. The **deadline for submission is September 17th 2018.**



RECFA initiated Working Groups
*(to prepare the discussion at our PECFA meeting at ALBA
and to disseminate the information to the community)*

Working group on Software Skills

*(Kati Lassila-Perini, Alex Read, Eilam Gross, Tadeusz Lesiak
+ ECFA Chairperson and the current and incoming Secretary)*

- Based on an initial view of the potential future opportunities and challenges related to analysis tools from trigger and reconstruction to selection and estimation, how should the particle physics community optimally prepare itself and how well are we currently preparing?
 - Stimulate the community to invest in a transition from a mostly “users” community of novel software tools to a partially “developers” community
 - Overview the IT-profile of the European particle physics community with the help of RECFA members
 - Inform the community how we should prepare to embrace optimally and adequately software skills in our research programmes and research community
- Link to HEP Software Foundation “White paper”: <https://arxiv.org/pdf/1712.06982.pdf>
- **With the help of RECFA members:** a census of software engineers (or equivalent) in HEP research in your country could feed into the European Strategy process.



Working group on Recognition of individual achievements

*(Stan Bentvelsen, Roger Forty, David Milstedt, Peter Schleper, Antonio Zoccoli,
+ ECFA Chairperson and the current and incoming Secretary)*

- Verify how short the bridges can be between the achievements of individuals and making these achievements know for the community outside scientific collaborations.
- To inform the panel debate/discussion, we collected information from scientific collaborations and from the community. A comprehensive overview will be presented to PECFA tomorrow.
- Based on the outcome of the debate/discussion we might opt for a **community wide survey** with educated and focussed questions. The timescale for this would be to close the survey and study by the PECFA meeting at CERN (Nov 2018), such as to be timely for input to the European Strategy update.



European Strategy for Particle Physics Update

Key objectives set by Council

- Deliver by May 2020 an update of the European Strategy for Particle Physics in a global context (decision of Council, December 2016)
- This strategy or vision will thereafter be a roadmap for funding agencies and laboratories to define concrete research programmes

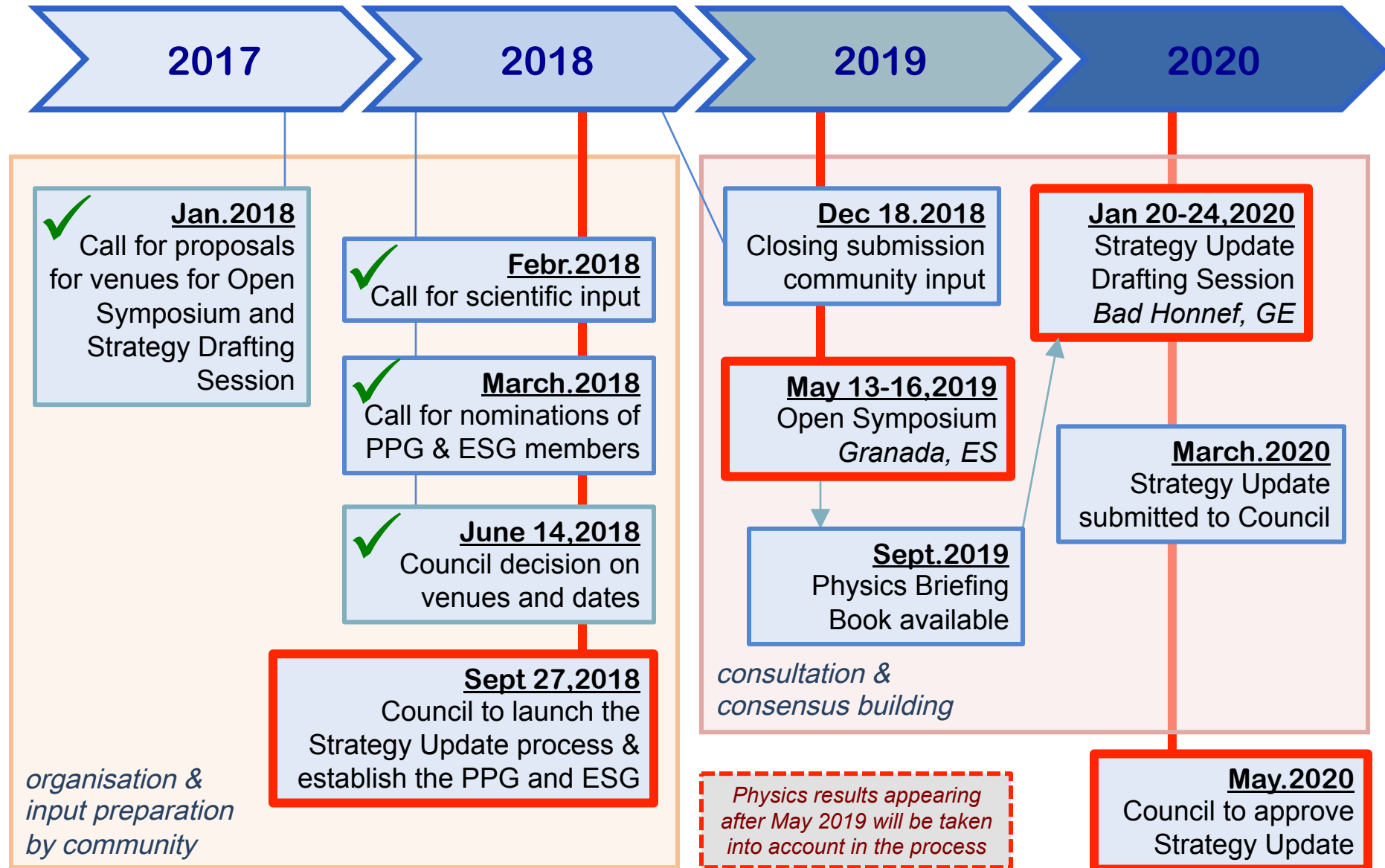
Council appointment, September 2017:

- Professor H. Abramowicz (Chairperson)
- Professor K. Ellis (SPC Chairperson)
- Professor J. D'Hondt (ECFA Chairperson)
- Professor L. Rivkin (European LDG Chairperson)
- Contact: EPPSU-Strategy-Secretariat@cern.ch

Responsible for the organisation
of the process.

First action of the Strategy Secretariat was to deliver a concrete timeline

European Particle Physics Strategy Update



General considerations by the Strategy Secretariat:

- The Strategy Update process follows a bottom-up approach
- To facilitate the bottom-up approach an Open Call for input reaching out to all members of the particle physics community is issued; including research groups, research networks or collaborations, laboratories, universities, (inter)national institutions and/or organisations.
- The aim is to gather all relevant input, e.g. on scientific projects, position papers, national roadmaps, etc.

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Deadline: December 18th, 2018

Pragmatically, general guidelines are provided to facilitate both the collection of the input and its use by the PPG and the ESG; i.e. be brief, comprehensive and self-contained.

Procedure for the ECFA recommended members

Physics Preparatory Group (PPG) composition, adopted by Council, December 2013:

- The Strategy Secretary (acting as Chairperson),
- four members appointed by the Council on the recommendation of the SPC,
- four members appointed by the Council on the recommendation of ECFA,
- the SPC Chairperson,
- the ECFA Chairperson,
- the Chairperson of the European Laboratory Directors' meeting,
- one representative appointed by CERN,
- two representatives from Asia appointed by the respective regional representatives in ICFA,
- two representatives from the Americas appointed by the respective regional representatives in ICFA.

Responsible to organise the Open Symposium and to deliver to the European Strategy Group (ESG) a Physics Briefing book.

Following the procedure agreed by RECFA at its meeting on March 24 in Bucharest:

- On March 27, the ECFA Chairperson issued a call for nominations to all PECFA members (deadline for nominations was set to April 23; nominations were submitted to the ECFA Chairperson via a RECFA delegate), also non-ECFA members can be and were nominated,
- The ECFA Chairperson consulted with several RECFA members (and with the SPC Chairperson) and proposed four names for endorsement at the RECFA meeting in Bratislava on May 19.

Members recommended by ECFA

- **Stan Bentvelsen** (NIKHEF/Netherlands): HERA, LEP, ATLAS, member of several astroparticle committees, director of NIKHEF with a wide physics overview, and affinity with outreach
- **Paris Sphicas** (Athens/Greece and CERN): UA1, CDF, CMS, B physics, EW physics, electronics/DAQ/trigger/computing, searches, broad physics overview, summary speaker at the last EPS-HEPP conference
- **Marco Zito** (Saclay/France): neutrino physics, T2K, Hyper-K, DUNE, WA105 (Long Baseline demo for double-phase Liquid Argon TPC and MIND detectors), gave a plenary talk on neutrino physics at the previous Strategy Open Symposium, previously BaBar
- **Antonio Zoccoli** (Bologna/Italy): LEAR, HERA-B, ATLAS, experience with non-mainstream experiments at CERN and elsewhere, broad overview as vice-president of INFN
- RECFA unanimously and strongly supported these nominations, and agreed to transmit these to the President of Council. **I ask PECFA to support these nominations.**
- The approval process is ongoing, hence the names of our nominees are not yet public.

European Strategy Group (ESG) composition, adopted by Council, December 2013:

- the Strategy Secretary (acting as Chairperson),
- one representative appointed by each CERN Member State,
- one representative for each of the Laboratories participating in the major European Laboratory Directors' meeting, including its Chairperson,
- the CERN Director-General,
- the SPC Chairperson,
- the ECFA Chairperson.

Responsible to deliver a draft Strategy Update to Council.

Invited:

- the President of the CERN Council,
- one representative from each of the Associate Member States,
- one representative from each Observer State,
- one representative from the European Commission,
- the Chairpersons of ApPEC, FALC, ESFRI and NuPECC,
- the members of the Physics Preparatory Group.



News from ICFA, especially on the ILC project



Report from ICFA

International Committee for Future Accelerators (<http://icfa.fnal.gov>)

Current members:

G. Taylor, Chair, Australia

P. Bhat, Secretary, USA

J. D'Hondt, F. Gianotti, J. Mnich (previous chair), CERN Member States

N. Lockyer, D. MacFarlane, N. Hadley, USA

I. Koop, V. Petrov, Russia

Y. Wang, China

T. Mori, M. Yamauchi, Japan

M. Roney, Canada

E. Álvarez, Other Countries

V. Matveev, Other Countries

P.A. Naik, Other Countries

H. Schellman, Chair of the IUPAP Commission on Particles and Fields (ex officio)



Report from ICFA

International Committee for Future Accelerators (<http://icfa.fnal.gov>)

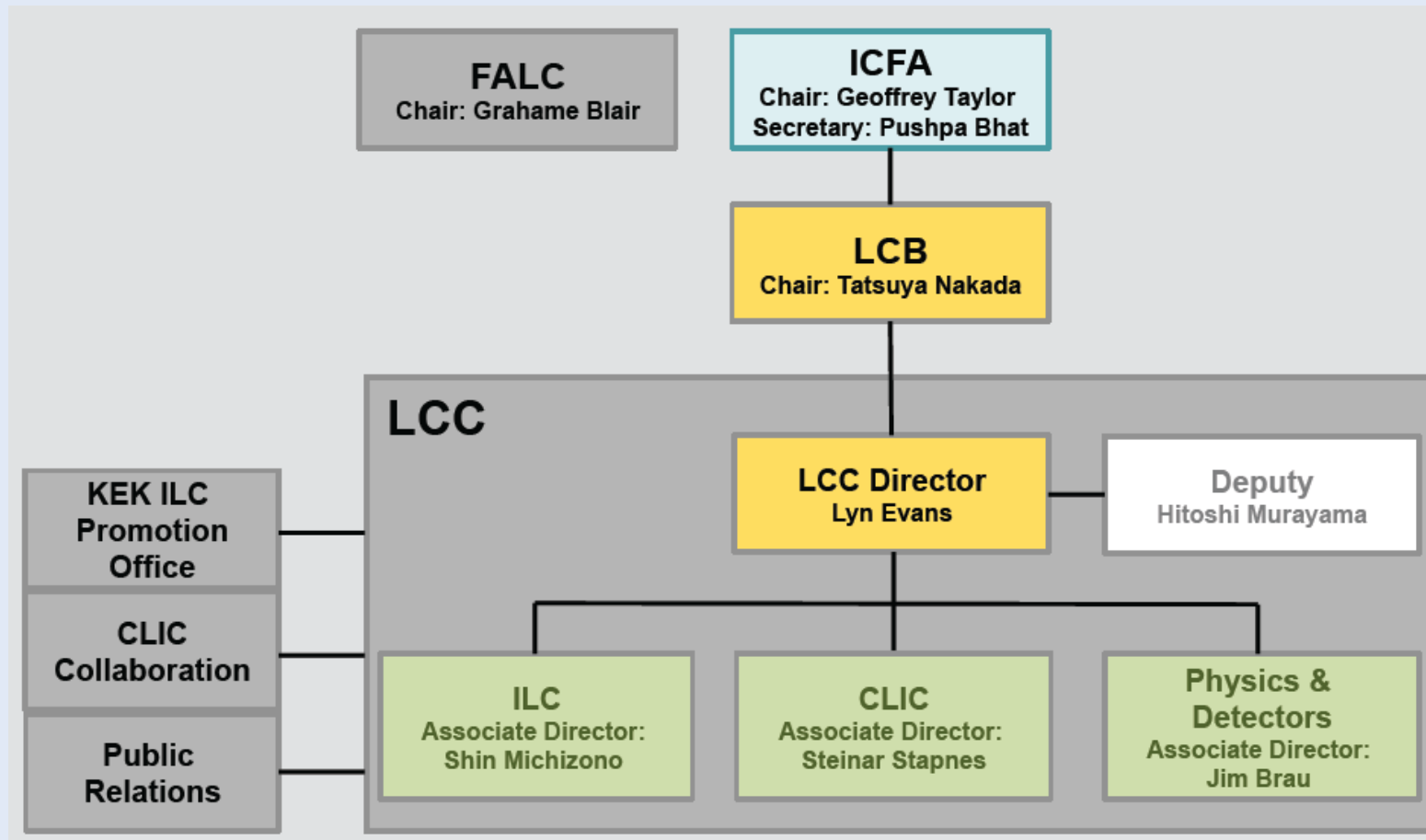
Current panels:

- ICFA Instrumentation Innovation and Development Panel (Chair — Ariella Cattai, CERN)
- ICFA Beam Dynamics Panel (Chair — Yong Ho Chin, KEK)
- ICFA Panel on Advanced and Novel Accelerators (Chair — Brigitte Cros, Paris)
- ICFA Standing Committee on Interregional Connectivity (Chair — Harvey Newman, Caltech)
- ICFA Study Group on Data Preservation in High Energy Physics (Chair – Cristinel Diaconu, CPPM, Marseille)
- **Linear Collider Board (Chair – Tatsuya Nakada, EPFL, Lausanne)**
- ICFA Panel on Sustainable Accelerators and Colliders (Chair — Mike Seidel, PSI)

Report from ICFA/LCB (82nd meeting on July 8, 2018, Seoul/ICHEP, Korea)

International Committee for Future Accelerators (<http://icfa.fnal.gov>)

Joined meeting with the Linear Collider Board (LCB, <http://icfa.fnal.gov/panels/linear-collider-board/>)



Procedure deployed in Japan towards ILC250 support

Working groups:

(*)TDR validation

(*)Particle and Nuclear Physics

Human Resources

Organisation/Management

() reactivated for ILC250 proposal*

June 19



ILC Advisory Panel
(meeting on July 4)



Decision by MEXT
(by Autumn 2018)



**Opinion of SCJ
(next 2-3 months)**

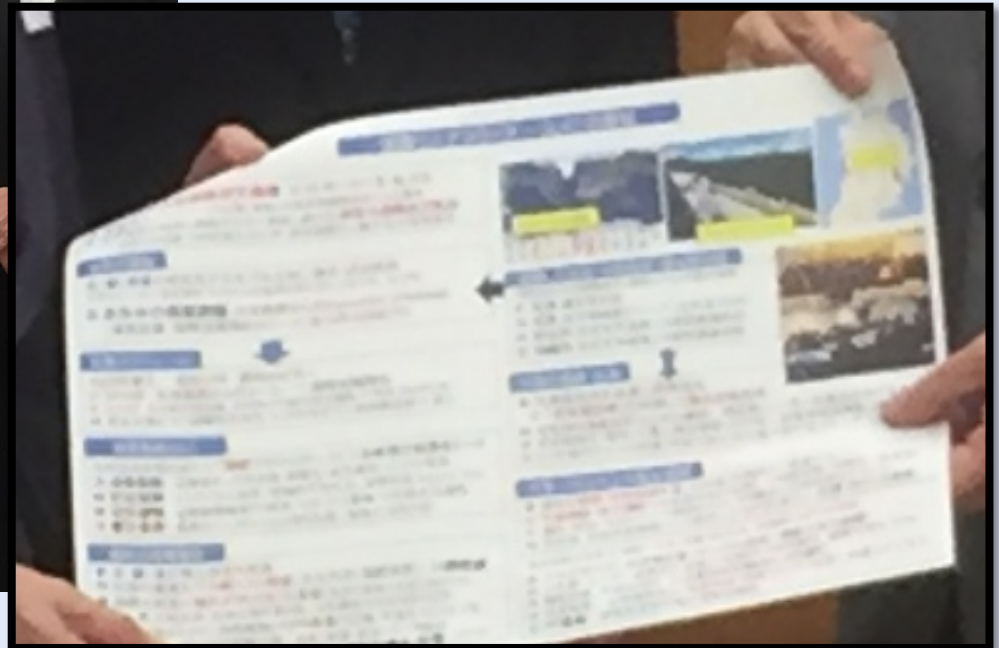
Meanwhile the political process continues, including visits of Japanese Diet members to Germany and France, to the USA, and potentially in winter 2018-2019 to Italy-Spain-UK.

Japanese scientists and government understood that a statement is expected by the end of 2018 in order for the ILC to be considered in the update of the European Strategy.



On the political front in Japan (July 5, meeting with PM Abe)

Satoru Yamashita, Uni. of Tokyo



Linear Collider community beyond a Japanese statement

- The concluding statement later this year from the Japanese government on the ILC project will be a milestone for the particle physics community on the global scale.
- The LCB/ICFA meeting foreseen in March 7-9, 2019, in Tokyo, will be an opportunity to digest the Japanese statement towards formulating an ICFA conclusion.
- Taking into account these elements, it was agreed at our recent LCB/ICFA meeting that the Linear Collider community (ILC+CLIC) should meet to verify its opportunities; and this prior to the Open Symposium of the European Strategy process.
- Intention: a 2-day meeting will be organised in March/April 2019 nearby CERN (e.g. Lausanne, Aix-les-Bains, etc.) to facilitate this gathering of the Linear Collider community.

Dissemination of Plenary ECFA discussions

- Facilitate ECFA members to inform their communities with a brief and comprehensive ECFA newsletter.
- It would summarize the Plenary ECFA meetings and include relevant announcements.
- Would be available as a PDF document (only digital) on the to-be-upgraded ECFA website.
- Aim to have this available shortly after each PECFA meeting, hence twice per year (i.e. a Summer and a Winter edition).
- Do not hesitate to contact me with further thoughts on this aspect.



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THANK YOU FOR YOUR ATTENTION