LINAC16 – 1st Scientific Program Committee meeting

MSU, December 15-16, 2015

A. Facco
SPC Chair

MICHIGAN STATE UNIVERSITY

U.S. DEPARTMENT OF ENERGY | Office of Science

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LINAC16 SPC - Guidelines

- The LINAC conference has shown until now a very successful organizational scheme
- The last editions have shown a very good blend between high quality of the technical content, large amount of contributions and high enjoyability of the program for participants
- The SPC main guideline for the 2016 edition is trying to preserve this good equilibrium and make only the adjustments which are required by evolution of the scientific scenario
- In general, no major change in the SP structure is planned
- I thank Frank Gerick and Dan Berkovits, SPC chairs of Linac'14 and Linac'12 respectively, for giving me important information and material about their work for the previous two editions

Welcome and Logistics

- Welcome to the 1ST SPC meeting
- Folders:
  - Wireless Instructions-slide 4
  - Agenda
  - Working Group Assignments-slide 19
  - Shuttle Schedule
  - Local Map
  - Building Map
- Dinner will be held at the Hyatt Place Suites (2401 Showtime Drive, Lansing) in the Banquet Room
- Shuttles will pick up at the FRIB main entrance (see shuttle schedule)
- Instructions for FRIB tour
- Instructions for any needs – contact Amy McCausey

Today Agenda

201512 LINAC16 Scientific Program Committee (SPC-1) Meeting
Facility for Rare Isotope Beams (FRIB)
15-16 December 2015

AGENDA (Updated on December 9, 2015)

Start	Duration		Agenda Item	Discussion Leader
Tuesday, 15 December 2015 plenary session - 1221A&B Conference Room				
8:30 AM	0:15	01	Welcome	Y. Yamazaki, A Facco
8:45 AM	1:15		Logistics, Conference status, Charge, workplan, WG formation	A. Facco
10:00 AM	0:30		*Break - Committee Photo (Atrium)*	*outside 1221 A/B*
10:30 AM			*Split into four working groups*	
			WG1: Electron Accelerators and Applications - Executive Conference Room	
			WG2: Proton and Ion Accelerators and Applications - 3129 Conference Room	
			WG3: Technology - 1221B Conference Room	
			WG4: Beam Dynamics, Extreme Beams, Sources & Beam Related Technology - 1221A Conference Room	
10:30 AM	2:00		Working groups: 1st selection of proposals	
12:30 PM	1:00		*Lunch - on own*	*MSU Shaw Dining Hall*
1:30 PM	1:30		Working groups: 2nd selection of proposals	
3:00 PM	0:30		*Break*	*outside 1221 A/B*
Reconvene as group in 1221 A&B				
3:30 PM	1:30		Plenary session: progress reports of WG chairs	
5:00 PM			Adjourn	
5:10 PM			Bus to Hyatt	Meet at FRIB Lobby
6:00 PM	2:00		*Dinner*	*Hyatt Place Banquet Room*

Tomorrow Agenda

Wednesday, 16 December 2015

Plenary session - 1221A&B Conference Room

8:30 AM	0:30	Charge for day 2	A. Facco
		Split into four working groups	
		WG1: Electron Accelerators and Applications - Executive Conference Room	
		WG2: Proton and Ion Accelerators and Applications - 3129 Conference Room	
		WG3: Technology - 1221B Conference Room	
		WG4: Beam Dynamics, Extreme Beams, Sources & Beam Related Technology - 1221A Conference Room	
9:00 AM	1:30	Working groups: 3rd selection of proposals	
10:30 AM	0:30	*Break*	*outside 1221 A/B*
11:00 AM	0:00	Reconvene as group in 1221 A&B	
11:00 AM	1:30	Plenary session: synthesis and balancing	*1221 A/B*
12:30 PM	1:00	*Lunch - on own*	*MSU Shaw Dining Hall*
1:30 PM	1:30	Plenary session: meeting conclusions, SPC2 preparation	
3:00 PM	0:30	*Break*	*outside 1221 A/B*
3:30 PM	2:00	*FRIB Tour*	
5:30 PM		*Adjourn*	
5:30 PM		Bus to Hyatt	Meet at FRIB Lobby

LINAC16 SPC Meeting
Wireless Instructions

A Guide To Using MSU's Wireless Network At The NSCL-FRIB

The wireless access at the NSCL is provided by Michigan State University. There are two separate wireless networks to choose from: ***MSUNet Wireless Guest*** *and* ***MSUNet Wireless.***

If you do not have a MSU NetID (Guests) – select *MSUNet Wireless Guest*

- Make sure your computer's wireless internet is turned on.
- From your computer's wireless connection manager, select ***MSUNet Wireless Guest*** as your network. Once it has connected, open your web browser.
- The web browser should automatically display a page from MSU asking you to agree to the terms of use. Select the "I Agree" button. You should now be connected.
- *Note:* Guest Wireless has slower download speeds

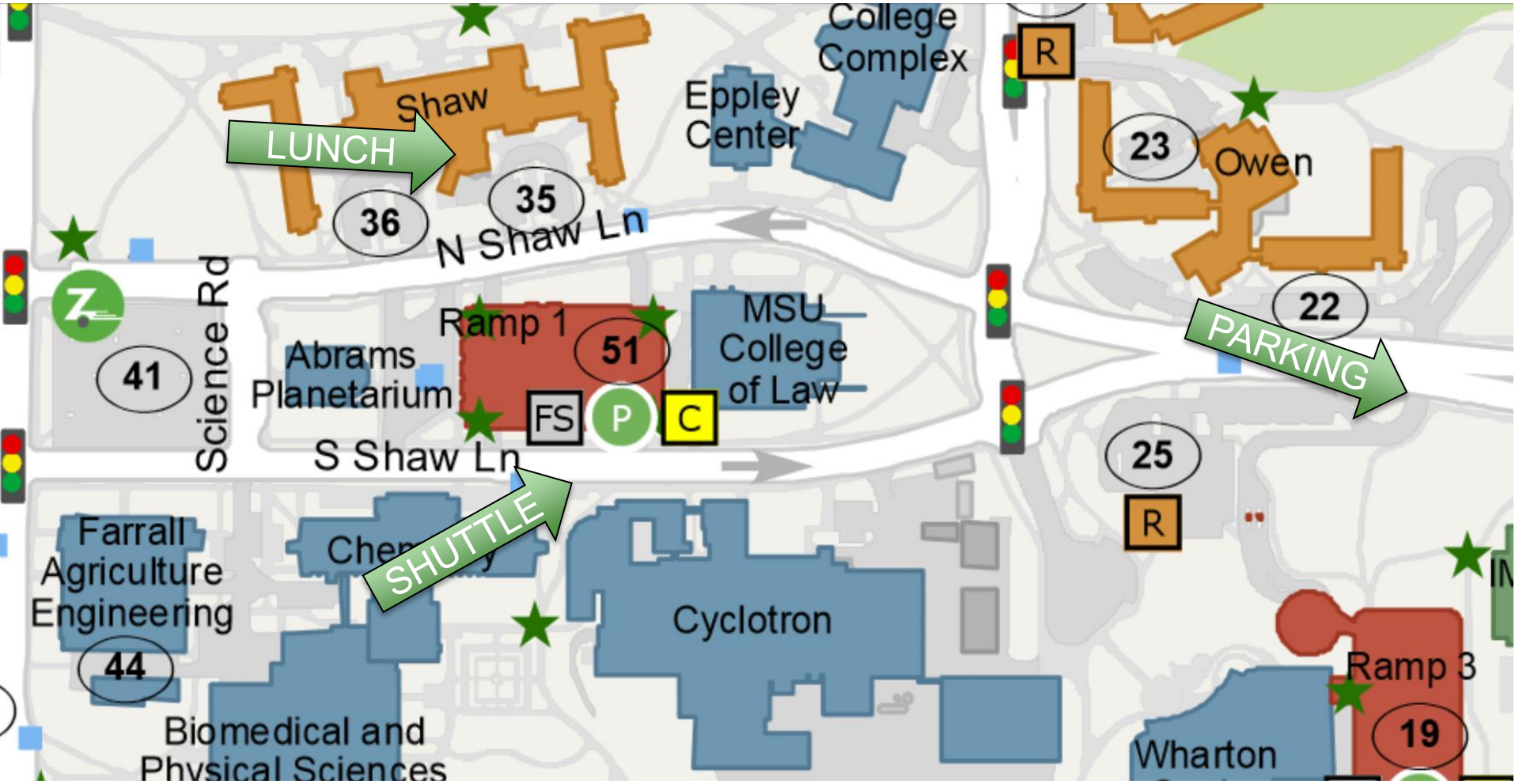
If you have a MSU NetID (MSU staff/students) - select *MSUNet Wireless*

- Make sure your computer's wireless internet is turned on.
- From your computer's wireless connection manager, select ***MSUNet Wireless*** as your network. Once it has connected, open your web browser.
- The web browser should automatically display a page from MSU prompting you to enter your NetID and password. Fill in those fields and select the continue button. You should now be connected.
- *Note:* A MSU NetID is the first part of your MSU Email Address

Questions?

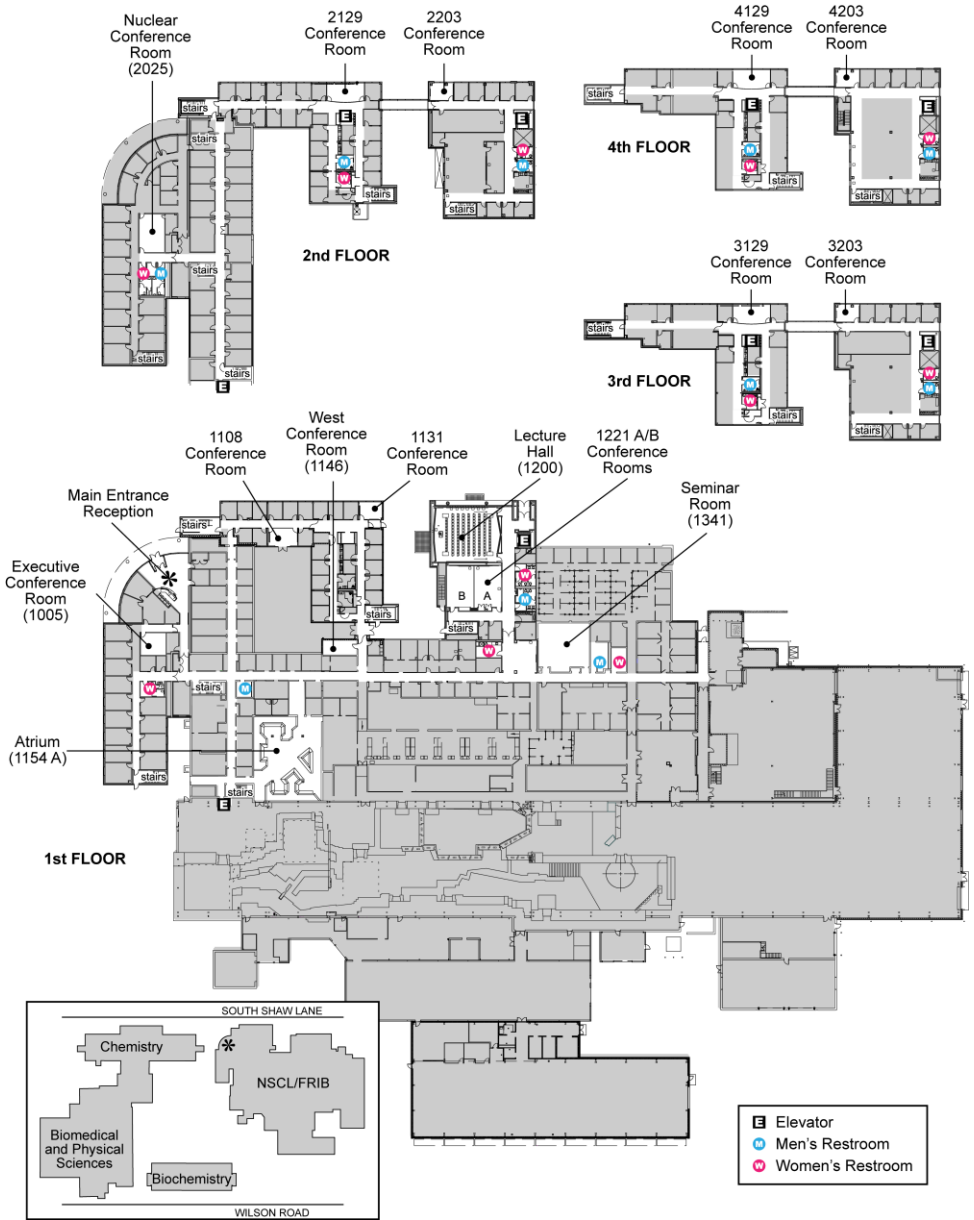
Please contact the NSCL help room at extension 407 with any questions you may have.

LINAC16 SPC Meeting
Campus Map



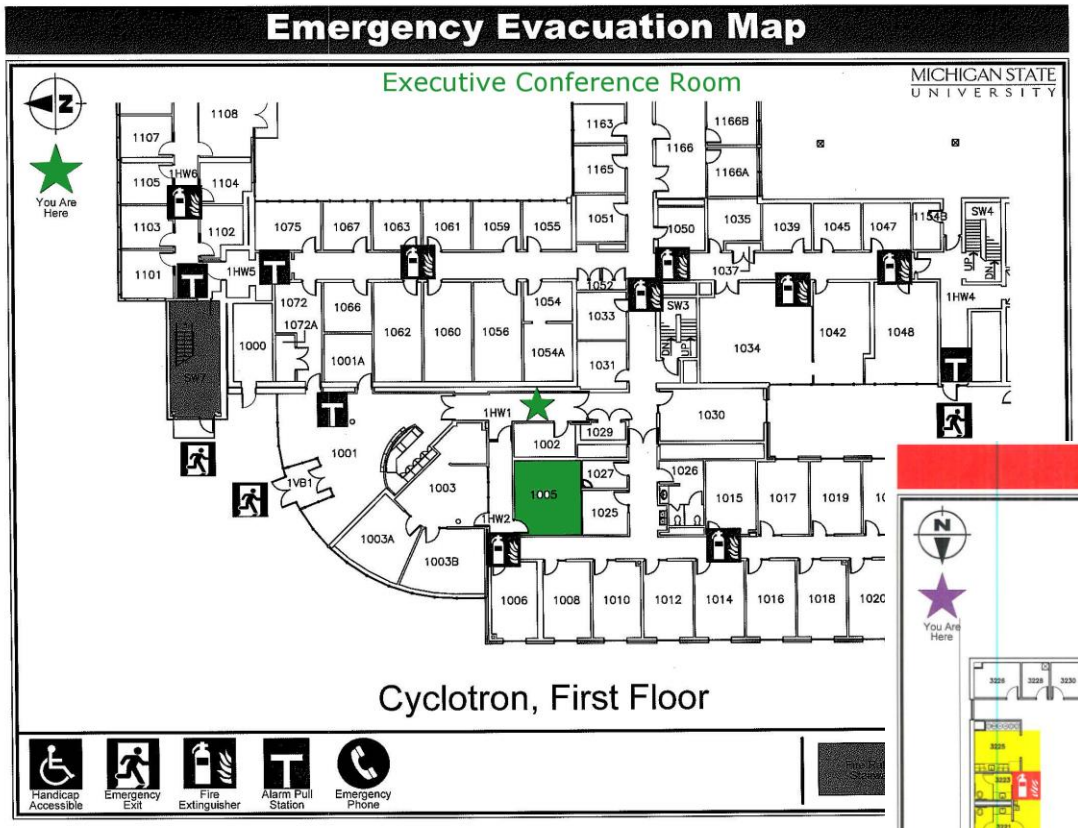
Full Campus Map: http://maps.msu.edu/__public/pdfs/MSU_main_campus.pdf

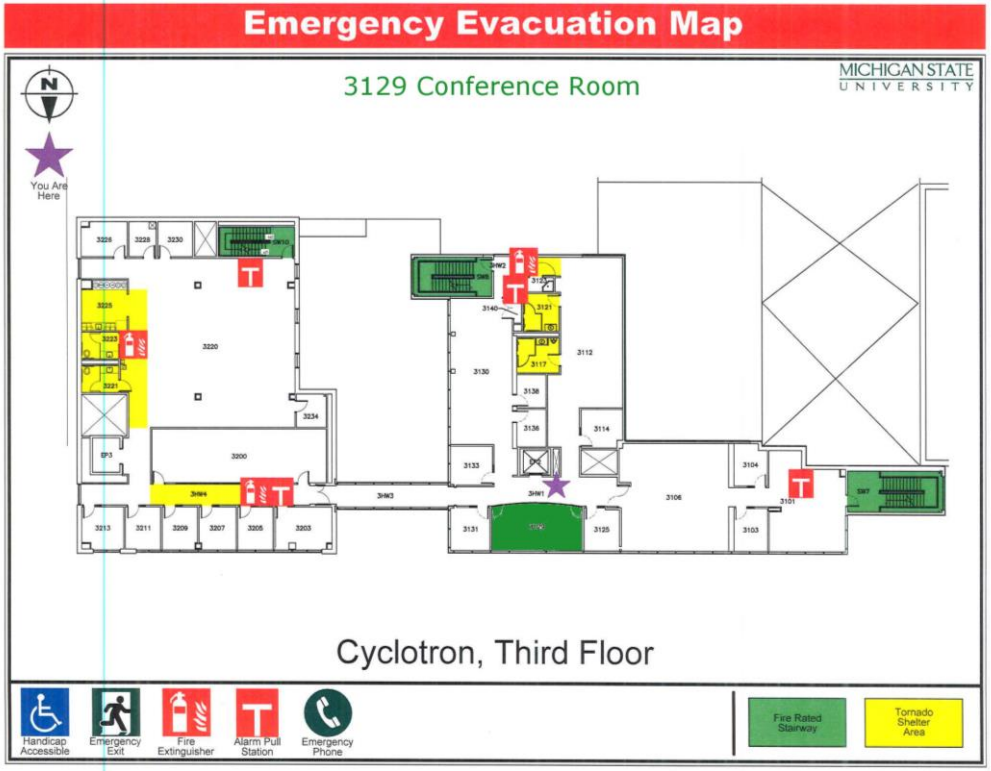
LINAC16 SPC Meeting
Building Map



LINAC16 SPC Meeting

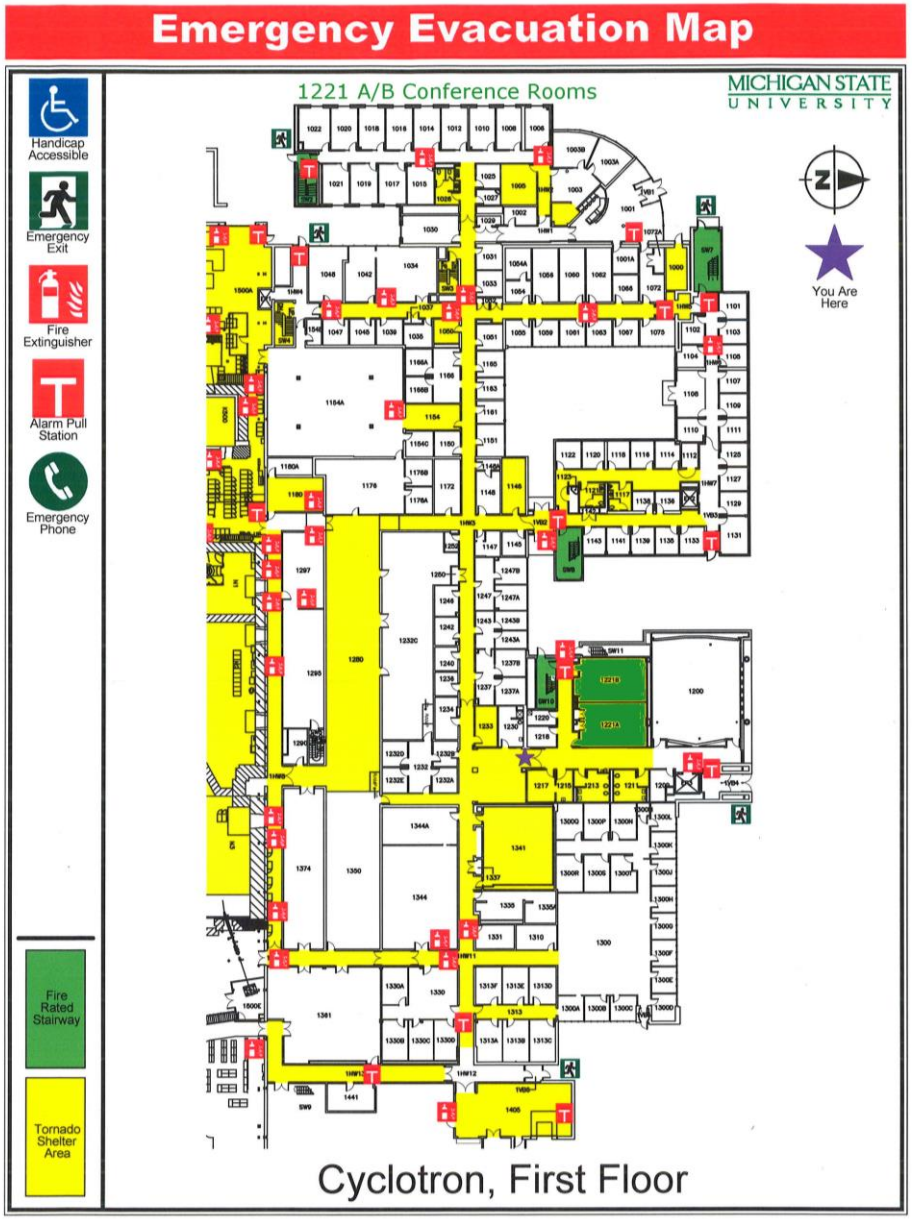
Emergency Evacuation-WG-1 & WG-2





LINAC16 SPC Meeting

Emergency Evacuation-WG-3 & WG-4



SPC1 Meeting Goals

- Finalizing the program structure
- Selecting the invited talks (all but 5) and their speakers
- Achieve good balance among:
  - Talks classifications (depending on proposals received, aiming at fulfilling the LINAC conference main subjects)
  - Countries and regions (~continents)
  - Laboratories

Talks Classifications

Main Classification	*Sub-Classification*
01 Electron Accelerators and Applications	1A Electron linac projects
	1B Energy recovery linacs
	1C Synchrotron light sources
	1D FELs
	1E Colliders
	1F Industrial and medical accelerators
	1G Other electron accelerators
02 Proton and Ion Accelerators and Applications	2A Proton linac projects
	2B Ion linac projects
	2C RFQs
	2D Room temperature structures
	2E Superconducting structures
	2F Industrial and medical accelerators
	2G Other proton/ion
03 Technology	3A Superconducting RF
	3B Room temperature RF
	3C RF power sources and power couplers
	3D Low level RF
	3E Cryomodules and cryogenics
	3F Insertion devices
	3G Beam diagnostics
	3H Industrial developments
	3I Other technology
04 Beam dynamics, extreme beams, sources and beam related technologies	4A Beam Dynamics, beam simulations, beam transport
	4B Electron and ion sources, guns, photo injectors, charge breeders
	4C Plasma and wakefield acceleration
	4D Control system
	4E Industrial developments
	4F Other beams
05 Opening and Closing Sessions	5A Opening session
	5**A** Closing session

Program Structure Definition

Monday		Tuesday		Wednesday		Thursday		Friday	
	Registration	8:30	30 min	8:30	20 min	8:30	30 min	8:30	20 min
				8:50	20 min			8:50	20 min
9:00	Welcome-OC	9:00	30 min	9:10	20 min	9:00	30 min	9:10	20 min
9:30	Opening 1	9:30	20 min	9:30	20 min	9:30	20 min	9:30	20 min
		9:50	20 min	9:50	20 min	9:50	20 min	9:50	20 min
10:00	Opening 2	10:10	20 min	10:10	20 min	10:10	20 min	10:10	20 min (upgr. Pos.)
10:30	Coffee break								
11:00	30 min	11:00	30 min	11:00	20 min	11:00	20 min	11:00	30 min
				11:20	20 min				
11:30	20 min	11:30	20 min	11:40	20 min	11:20	20 min	11:30	Closing 1
11:50	20 min	11:50	20 min	12:00	20 min	11:40	20 min (upgr. Pos.)		
12:10	20 min	12:10	20 min		Outing	12:00	Student poster	12:00	Closing 2
12:30	Lunch break					12:30	Lunch break	12:30	Closing remarks
14:00	20 min	14:00	20 min			14:00	20 min	13:00	*End FRIB Tour*
14:20	20 min	14:20	20 min			14:20	20 min		
14:40	20 min	14:40	20 min			14:40	20 min (upgr. Pos.)		
15:00	Oral posters	15:00	Oral posters			15:00	Oral posters		
16:00	Poster session	16:00	Poster session			16:00	Poster session		
18:00		18:00				18:00			

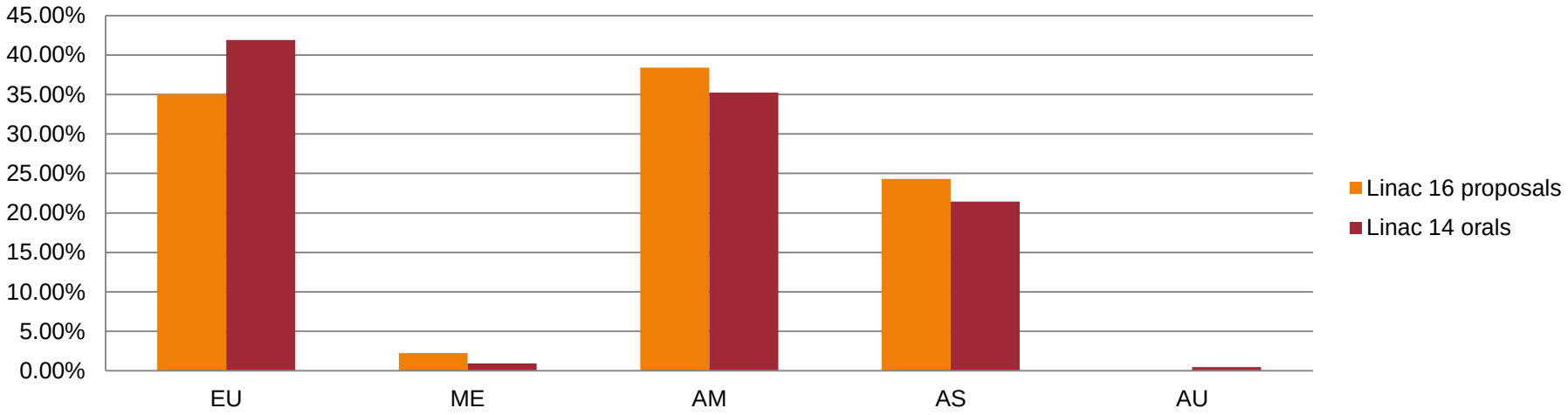
category	length	n.	day	notes	More notes
Welcome	30’	1	1	OC	
Closing remarks	30’	1	5	OC	
Opening session talk	30’	2	1	invited	
Closing session talk	30’	3	5	invited	
Electron accelerators	30’	3	(1-5)	invited	
Proton/ion accelerators	30’	3	(1-5)	invited	
Electron accelerators	20’	7	(1-5)	invited	Including 3 upgraded Posters
Proton/ion accelerators	20’	10	(1-5)	invited	
Technology	20’	15	(1-5)	invited	
Beam dynamics, sources	20’	8	(1-5)	invited	
Student poster talk	20’	1	4	selected	
Oral posters	5’	36	1,2,4	selected	
Poster sessions	2h	3	1,2,4		
Student poster session	5h	1	0		

Linac14 final structure and talks distributions

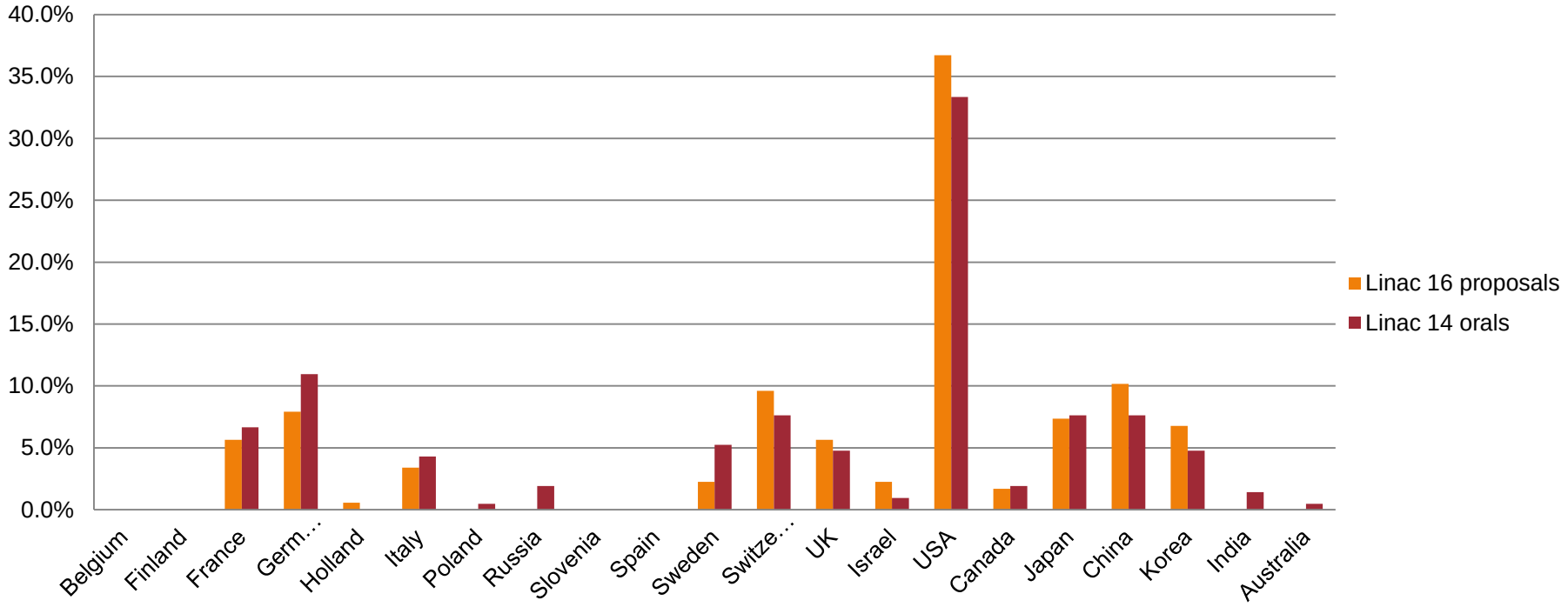
- I started from the Linac14 scheme to define the Linac16 one, and I did a few small modifications to bring the goal distribution between the linac14 and linac12 ones, and closer to the proposals distribution
- The total time was kept the same
- We can do further modifications if useful

Proposals by Geographical Areas

- N. 177 Proposals received for 13 Countries and 54 Labs
  - No proposals from Russia and India
  - 01 Electron Accelerators and Applications: n.47
  - 02 Proton and Ion Accelerators and Applications : n.56
  - 03 Technology : n.44
  - 04 Beam dynamics, sources, extreme beams : n.30
- By geographical areas: similar distribution as for LINAC14 invited program; more AM, AS and ME, less EU, no AU

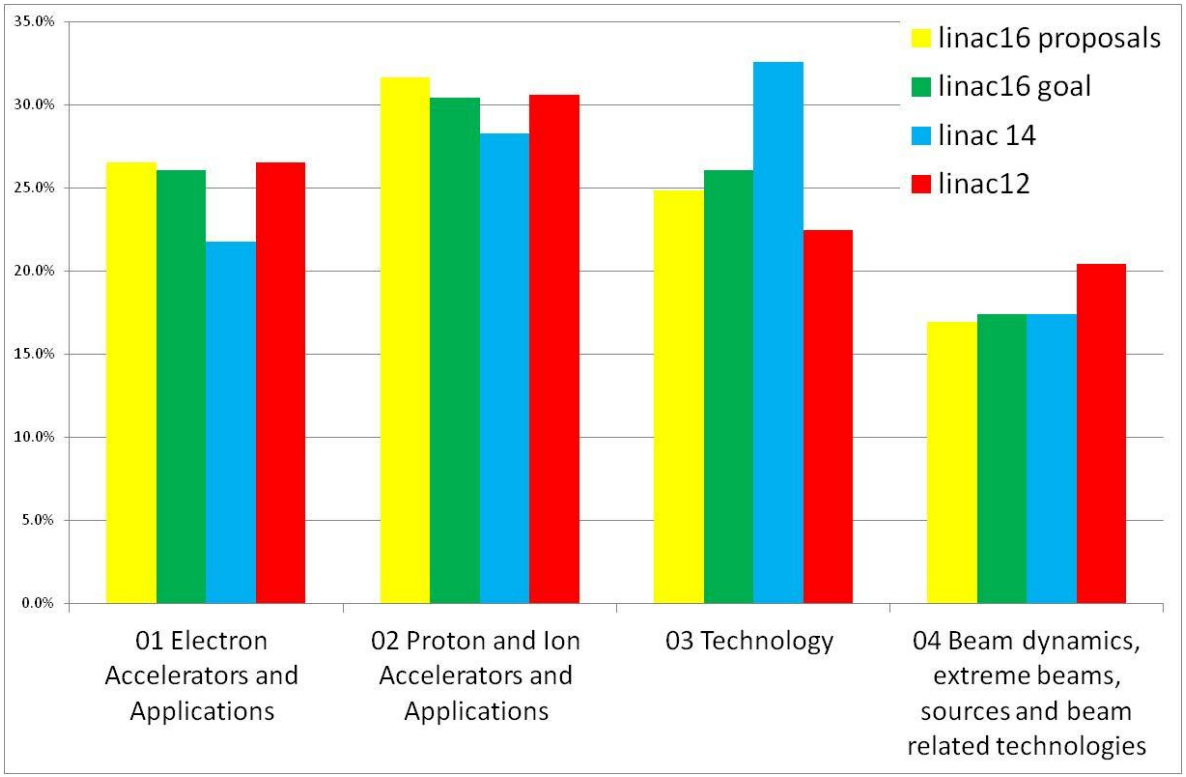


Proposals by Country (of the speaker's lab)



- No proposals for Russia, India, Australia, Belgium, Finland, Poland, Slovenia, Spain
- One proposal for Holland

Uploaded Proposals and Linac16 Goals vs. Classifications



- The goal distribution now lies between the Linac14 and Linac12 ones, tending to the distribution of the proposals uploaded by SPC/IOC

Linac16 Program Structure

- I have moved 2, 20’ talk from 03-Technology to 01-Electrons and one from 03-Technology to 02-protons
- I have moved 1 , 30’ talk from 05-Closing to 03-Technology
- In 02-Technology I have transformed back three 20’ talks to 2, 30’ talks

Monday		Tuesday		Wednesday		Thursday		Friday	
	Registration	8:30	30 min	8:30	30 min	8:30	30 min	8:30	20 min
				8:50				8:50	20 min
9:00	Welcome	9:00	30 min	9:10	30 min	9:00	30 min	9:10	20 min
9:30	Opening 1	9:30	20 min	9:30	20 min	9:30	20 min	9:30	20 min
10:00	Opening 2	9:50	20 min	9:50	20 min	9:50	20 min	9:50	20 min
		10:10	20 min	10:10	20 min	10:10	20 min	10:10	20 min
10:30	Coffee break								
11:00	30 min	11:00	30 min	11:00	20 min	11:00	20 min	11:00	30 min
				11:20	20 min				
11:30	20 min	11:30	20 min	11:40	20 min	11:20	20 min	11:30	Closing 1
11:50	20 min	11:50	20 min	12:00	20 min	11:40	20 min	12:00	Closing 2
12:10	20 min	12:10	20 min		Outing	12:00	Student poster		
12:30	Lunch break					Lunch break			Closing
14:00	20 min	14:00	20 min			14:00	20 min	14:00	*End*
14:20	20 min	14:20	20 min			14:20	20 min	14:20	
14:40	20 min	14:40	20 min			14:40	20 min	14:40	
15:00	Oral posters	15:00	Oral posters			15:00	Oral posters	15:00	
16:00	Poster session	16:00	Poster session			16:00	Poster session	16:00	
18:00		18:00				18:00		18:00	

Linac16 structure and talks distributionsPlanned: 13×30 min, 37×20 min

Present Linac16 Talks Goals Summary

Classification	Goal n. of talks	n. of 20'	Upgraded posters 20'	n. of 30'	Total time-min.	%talks	%time
01 Electron Accelerators and Applications	12	8	1	3	270	24.0	23.9
02 Proton and Ion Accelerators and Applications	14	10	1	3	310	28.0	27.4
03 Technology	12	8	1	3	270	24.0	23.9
04 Beam dynamics, extreme beams, sources and beam related technologies	8	7	1		160	16.0	14.2
05 Opening and Closing Sessions	4			4	120	8.0	10.6
Total	**50**	**33**	**4**	**13**	**1130**	**100%**	**100%**
Student poster price winner	1	1			20		
welcome and closing remarks	2			2	60		
total incl. Opening and closing, student	**53**	**34**	**4**	**15**	**1210**		

- I chose to start with 4 upgraded posters (instead of 3), one per classification

Remarks on Talks Selection in SPC1

- We must choose all program talks except for the following 5:
  - 4 posters which will be upgraded to 20’ invited (ideally 1 per classification) at the second SPC meeting, SPC2
  - one 20’ talk which will be assigned to the student prize winner at the conference
  - (Welcome talk and closing remarks are assigned by default to the Organizing Committee)
- The total time of talks of 1130’ at our disposal cannot be exceeded, but each WG can transform 3×20’ talks in 2×30’ talks and vice-versa, if they find it useful, ending with not more than 3×30’ talks per classification
- WG are encouraged to point out talks as suitable candidates for opening and closing sessions

Students Program

- Special Poster Session for Students
  - Sunday, 25 September 2016. Posters from 4:00 pm to 6:30.pm
  - SPC judges will select winner poster and two more
    - » The quality of both the scientific work and the poster
    - » The professionalism of the interaction with the judges at the poster
    - » The promise for the future
  - We will need numerous SPC members to serve as judges
- 1st Prize
  The winner will receive a cash prize of $1,000 and will have the opportunity to give a twenty minute oral presentation within one of the plenary sessions of LINAC16.
- 2nd and 3rd Prizes
  Each winner will receive a cash prize of $500.

Working Groups - updated

Main Classification	*Working group*
WG 1 Electrons	Convener: **Yong Ho Chin (J)** Members: **Deepak Raparia (USA), Burt Graeme (UK), Richard York (USA), Eric Colby (USA), Aaron Tremaine (USA)**
WG 2 Protons/Ions	Convener: **Frank Gerigk (CH)** Members: **Yan Zhang (USA), Alwin Schempp (D), Nikolay Solyak (USA), Milorad Popovich (USA)** **from remote: Peter Ostroumov (USA), Valentin Paramonov (RUS)** **[not yet confirmed: Hongwei Zhao (PRC)]**
WG 3 Technology	Convener: **Dan Berkovits (IL)*** Members: **Bob Laxdal (CAN), David McGinnis (UK), Walid Kaabi (F), Vyacheslav Yakovlev (USA), Jean Delayen (USA)**
WG 4 dynamics and more	Convener: **Tim Maxwell (USA)*** Members: **Lars Groening (D) , Patrick Bertrand (F), Sasha Aleksandrov (USA), Kip Bishofberger (USA)** **from remote: Cameron Geddes (USA)**

1st priority choice; **2nd priority choice**; **no choice expressed**
***** changed from preliminary list**

Criteria applied, when possible: i) working group chairs from 4 regions, ii) all working groups contain members of the 3 main regions*, iii) people of the same labs are in different working groups, iv) maximize the total priority choice

How Shall We Proceed

- 4 working groups
- Day1
  1. 1st selection: WGs will clean list from duplications, repeated speakers and wrong classifications; point out possible talks for opening/closing talks; select first key talks from less represented countries
  2. 2nd selection: WGs identify priority 1 talks (all 30' ones and all but three, 20' ones), plus 5 priority 2, 20' talks (since one more 20' talk will come from upgraded posters, there will be 3, 20' talks in excess per WG to play with on day 2.) (possible opening/closing talks can stay in the list)
  3. Plenary: 2nd selection merging, discussion on achieved balancing to guide day 2 work
- Day 2
  - 3rd selection: WGs to identify, out of the 20 priority 2, 20' talks, the 8 ones to be promoted to priority 1, having in mind balancing
  - Plenary : synthesis, check balancing, discussions of 3rd selection; opening and closing talks identification

In Detail: Day 1, 10:30
1st Selection (2h)

- I will give each WG chairman a USB key with the proposals of his WG, in a format where repeated speakers are highlighted
- The WG must:
  - Set all priorities to 3
  - Identify talks with wrong classification: propose new classification, inform the involved WG convener and find his agreement, and inform me of the change.
  - Remove duplications and similarities by selecting one talk, or by merging them in one talk with a suitable title and chosing the speaker
  - Identify key talks from less represented countries.Set them to priority 1 or 2
  - Point out also talks which could be suitable candidates for opening and closing sessions
  - Remove talks already present in Linac14 &12 (unless related to significant evolution of an ongoing activity). Avoid repeated talks from SRF15 and IPAC15, unless of fundamental interest for LINAC. In that case, propose modification of the title to significantly update, enlarge or modify the scope

In Detail: Day 1, 1:30PM
2nd Selection (1h30')

- Each WG must:
  1. Identify "priority 1" talks of his classification:
     a) All talks of 30' of the classification
     b) All but 3 talks of 20'-see table (one of the talks will be left for the poster upgrade)
     c) Decide possible changes of 3×20' in 2×30' talks or viceversa (max 3×30' final)
  2. Identify 5 "priority 2" talks of 20'
  3. All other talks will be set with priority ≥3 and removed from the list

  Each classification will be left with 3 talks in excess, available for further selection and balancing with other WGs

Working group n. of talks to be selected during day 1

WG	30' priority 1	20' priority 1	20' priority 2	Total after 2nd selection
01 Electrons	**3**	**6**	**5**	**14**
02 Protons	**3**	**8**	**5**	**16**
03 Technology	**3**	**6**	**5**	**14**
04 Beam dynamics+	**0**	**5**	**5**	**10**

In Detail: Day 1, 3:30PM
2nd Selection Plenary (1h30')

- 2nd selection merging and balancing
- The WG convener
  - will give me the result of the 2nd selection
  - Will give me the list of possible opening-closing talks
  - Will present the results of his WG in 15'
- The SPC chairman
  - Will present the achieved balancing of the WG selections
    - » Regions
    - » Countries
    - » Laboratories
    - » Sub-classifications
  - Will present the list of candidate opening/closing talks
- The results will be discussed and the actions to improve balancing in the next selection will be planned

In Detail: Day 2, 9:00AM
3rd Selection (1h30')

- 3rd selection in WGs to identify, out of the 20 talks with priority 2, the 8 ones to be promoted to priority 1 (ideally 2 per classification)
- The choice must be made taking into account and improving the balancing that was achieved in the 2nd selection, as discussed in the previous plenary

Working group n. of talks to be selected during day 2

WG	Total after 2nd selection	20' - priority 2 after 2° selection	20' - priority 2 promoted to priority 1	Total priority 1 after 3rd selection
01 Electrons	14	5	2	11
02 Protons	16	5	2	13
03 Technology	14	5	2	11
04 Beam dynamics	10	5	2	7

In Detail: Day 2, 11:00AM
3rd Selection Plenary (1h30')

- 3rd selection merging and balancing
- Each WG convener
  - will give me the file with the 3rd selection
  - Will present the results of his WG in 15'
- The SPC chairman will present the achieved balancing, the results will be discussed and if necessary adjusted

In Detail: Day 2, 1:30PM
Final Selection Plenary (1h30')

- The SPC chairman will show the list of Opening/Closing talks candidates and the list will be defined by voting
  - If one of the selected priority1 talks will be promoted to opening/closing, one of the priority 2 talks will be promoted to priority1 having in ming balancing
- The final invited program will be finalized (except for the 4 poster talks upgraded and for the student poster).

Working group n. of talks to be selected during day 2

WG	Total after 2nd selection	Total after 3rd selection
05 Opening	**List created**	**2**
05 Closing	**List created**	**2**

- The next meeting SPC2 will be planned

Summary Table WG Goals

Goal of:	WG1	WG4	WG3	WG4
1° selection	Clean list, find op./clos., unrepresented countries talks	Clean list, find opening/closing unrepresented countries talks	Clean list, find opening/closing unrepresented countries talks	Clean list, find opening/closing unrepresented countries talks
2° selection	3×30’ priority 1 6×20’ priority 1 5×20’ priority 2	3×30’ priority 1 8×20’ priority 1 5×20’ priority 2	3×30’ priority 1 6×20’ priority 1 5×20’ priority 2	5×20’ priority 1 5×20’ priority 2
3° selection	5×20’ proirity 2 → 2×20’ priority 1 per WG 4×30’ Opening/closing			
SPC2	1×20’	1×20’	1×20’	1×20’

WG rooms

- WG1: Executive Conference room (1° floor)
- WG2: 3129 (3° floor-teleconference available)
- WG3: 1221B Lecture hall (1° floor)
- WG4: 1221A (1° floor-teleconference available)

- Plenary sessions in room 1221 A/B