Project outlook

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Annecy- SuperB XII General Meeting

March16-19, 2010

On process

We have been visited by President of INFN

- No showstopper in the approval process
- Slightly slower than we expected
- CIPE is examining the proposal for a full funding O(700 M€)
- PNR insertion expected soon with highest priority would allow a special funding from the MIUR from national Research Undivided Fund.

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Mou for TDR agreed between INFN and IN2P3.

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Bilateral agreement between INFN and Spain is ready.

People

The convention between INFN and IN2P3 for making possible hiring people in LAL that can work for example in Frascati within LNF Accelerator Division had received in a positive way by INFN.
Still not in operation.
Management is working to accelerate timing.

This meeting

Good progress in the preparation of white paper:

- Physics document ready
- Detector and Accelerator in a good shape expected soon.

Geometry working group has done a very good job for the best possible design of the detector.

We all acknowledge the positive response by the community.

We have now flexibility in parameters for the *"baseline luminosity 10^{36}"* we have also a parameter list for *low c.m.s.Energy runs*

Parameters

		Base Line		Low Emittance		High Current		Tau/Charm (prelim.)	
Parameter	Units	HER (e+)	LER (e-)	HER (e+)	LER (e-)	HER (e+)	LER (e-)	HER (e+)	LER (e-)
LUMINOSITY	$cm^{-2}\ s^{-1}$	1.00E+36		1.00E+36		1.00E+36		1.00E+35	
Energy	GeV	6.7	4.18	6.7	4.18	6.7	4.18	2.58	1.61
Circumference	m	1258.4		1258.4		1258.4		1258.4	
X-Angle (full)	mrad	66		66		66		66	
Piwinski angle	rad	22.88	18.60	32.36	26.30	14.43	11.74	8.80	7.15
β_x @ IP	cm	2.6	3.2	2.6	3.2	5.06	6.22	6.76	8.32
β_y @ IP	cm	0.0253	0.0205	0.0179	0.0145	0.0292	0.0237	0.0658	0.0533
Coupling (full current)	%	0.25	0.25	0.25	0.25	0.5	0.5	0.25	0.25
ε_x (without IBS)	nm	1.97	1.82	1.00	0.91	1.97	1.82	1.97	1.82
ε_x (with IBS)	nm	2.00	2.46	1.00	1.23	2.00	2.46	5.20	6.4
ε_y	pm	5	6.15	2.5	3.075	10	12.3	13	16
σ_x @ IP	µm	7.211	8.872	5.099	6.274	10.060	12.370	18.749	23.076
σ_y @ IP	µm	0.036	0.036	0.021	0.021	0.054	0.054	0.092	0.092
Σ_x	µm	11.433		8.085		15.944		29.732	
Σ_y	µm	0.050		0.030		0.076		0.131	
σ_L (0 current)	mm	4.69	4.29	4.73	4.34	4.03	3.65	4.75	4.36
σ_L (full current)	mm	5	5	5	5	4.4	4.4	5	5
Beam current	mA	1892	2447	1460	1888	3094	4000	1365	1766
Buckets distance	#	2		2		1		1	
Ion gap	%	2		2		2		2	
RF frequency	Hz	4.76E+08		4.76E+08		4.76E+08		4.76E+08	
Harmonic number		1998		1998		1998		1998	
Number of bunches		978		978		1956		1956	
N. Particle/bunch		5.08E+10	6.56E+10	3.92E+10	5.06E+10	4.15E+10	5.36E+10	1.83E+10	2.37E+10
Tune shift x		0.0021	0.0033	0.0017	0.0025	0.0044	0.0067	0.0052	0.0080
Tune shift y		0.0970	0.0971	0.0891	0.0892	0.0684	0.0687	0.0909	0.0910
Long. damping time	msec	13.4	20.3	13.4	20.3	13.4	20.3	26.8	40.6
Energy Loss/turn	MeV	2.11	0.865	2.11	0.865	2.11	0.865	0.4	0.166
σ_E (full current)	dE/E	6.43E-04	7.34E-04	6.43E-04	7.34E-04	6.43E-04	7.34E-04	6.94E-04	7.34E-04
CM σ_E	dE/E	5.00E-04		5.00E-04		5.00E-04		5.26E-04	
Total lifetime	min	4.23	4.48	3.05	3.00	7.08	7.73	11.41	6.79
Total RF Power	MW	17.08		12.72		30.48		3.11	

Tau/charm threshold running at 10^{35}

Baseline + other 2 options:
- Lower y-emittance
- Higher currents (twice bunches)

Baseline:
- Higher emittance due to IBS
- Asymmetric beam currents

RF power includes SR and HOM

Some personal whishes..

Physics studies to continue evaluating any special request to detector.

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Impact of polarization on physics discovery still not sufficiently elucidated. It must be also connected to possible requests on detector design.

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Charm studies need more effort also in view of decisions about forward PID

Structure of Web page is there

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Present version

Will soon become

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Next time in Elba for our meeting XIII
May 31-June 4, 2010

XIII SuperB General Meeting - Isola d'Elba

from 30 May 2010 to 05 June 2010 (Europe/Rome) | La Biodola, Isola d'Elba

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support

Home

The **SuperB Pisa group** is happy to announce that the May 2010 SuperB Meeting will take place in La Biodola, Isola d'Elba.

Lying only 10 km from the mainland, Elba is the largest island in the Tuscan Archipelago and has become an internationally famous tourist resort. It offers a large number of attractions, hiking and climbing itineraries, bike trails and wonderful beaches. The excellent accommodation structures make it an ideal place to merge together work, study and relax.

Click here for a Google map of the meeting site with information

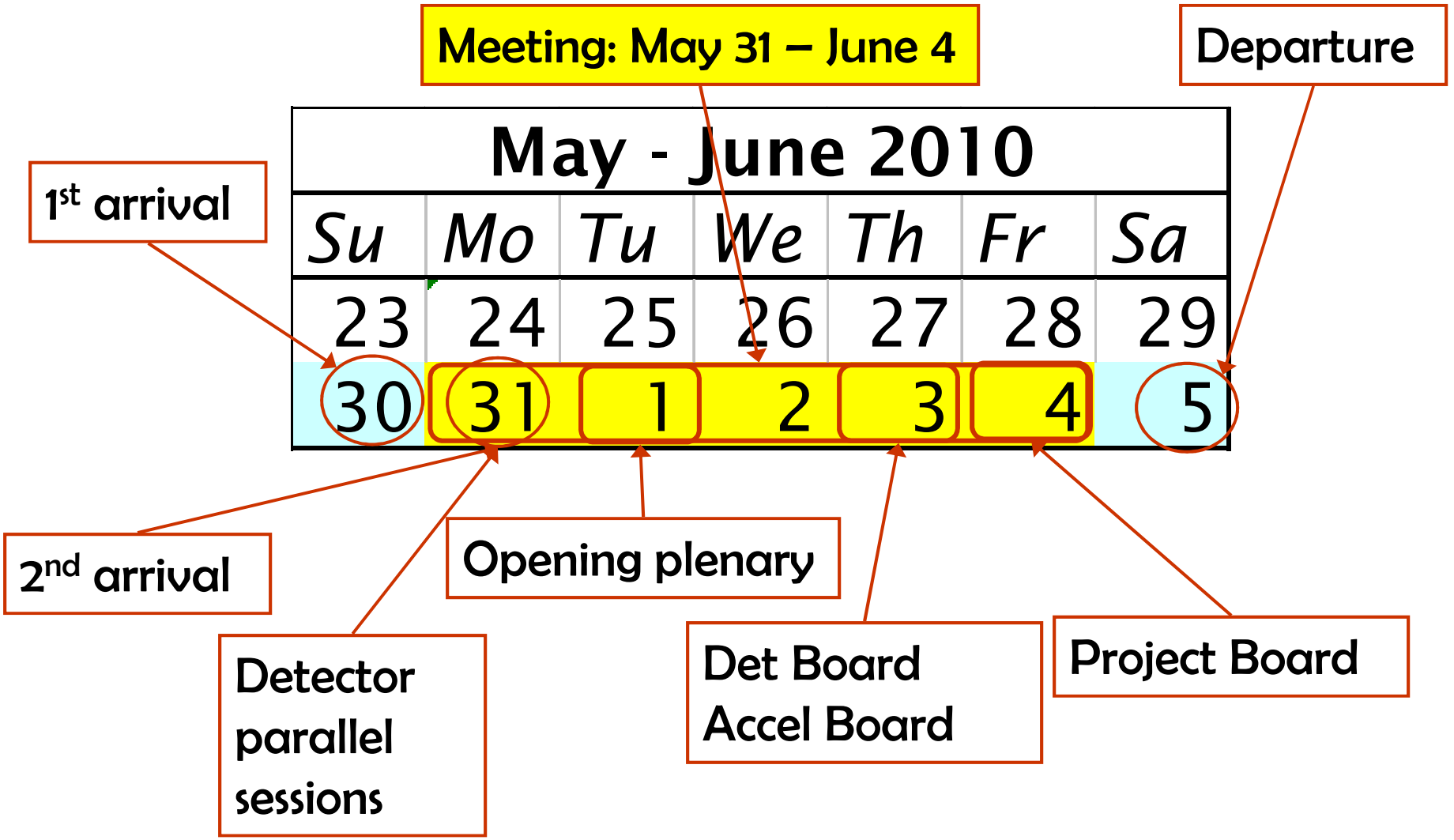
Deadline for registration is **Friday, April 30th**. Registration form and logistic information are linked from the left menu.

Meeting sessions will start in the morning of **Monday, May 31st** and finish in the evening of **Friday, June 4th**.

Participants are expected to arrive on Sunday, May 30th or on Monday, May 31st and to leave on Saturday, June 5th.

http://agenda.infn.it/conferenceDisplay.py?confId=2262

Tentative schedule



Thank you to:

Thank you to:

Director of Lapp

Thank you to:

Director of Lapp

Yannis

Very special Thanks to:

Very special Thanks to:

Andrea

Very special Thanks to:

Andrea, Myriam

Very special Thanks to:

Andrea, Myriam and to

Very special Thanks to:

Andrea, Myriam and to **Lucia**