



#### FOOT General Meeting

General info

Napoli 25 May 2017

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## A good starting point..

- Our status has been reviewed during the march CSN3 meeting. Unofficially the green light to the experiment has been given.
- Final approval of the entire experiment program and funding will be discussed by CSN3 on 21th of June. We are not supposed to report!
- The first, long waited for, absolutely preliminary, version0 of the CDR is born!!
- The CDR will be in principle the basis of the june CSN3 decision. The document should be given to the referees within 13<sup>th</sup> of June. It's our first milestone, by the way..
- CDR: need of common effort to get to final version



#### News & infos

- Strasbourg (IPHC) joined the collaboration to contribute to software developent of the silicon detectors. They are veterans of the FIRST experience
- A GSI group joined us. They will act also as our GSI representative in the beam time request, and in case of GSI data taking, will take care of the logistic
- Our experiment is on the spot in CSN3 to obtain external funding. In particular CSN3 is thinking about a FOOT-related application for the 2018 (LAST!) "premiali" funding
- The FOOT honeymoon with CSN3 is over, as far as the F.T.E. percentage is concerned. Minimum participation will increase to 20%. Even if we will have anyway enough FTE, this can be a problem for some personal participations.. Any clues???



# Money, as usual

- The requested budget for 5 years to CSN3 is 1,350 M€
- The SJ can be unlocked: 4 section will have some money withiut requests on 29<sup>th</sup> (TIFPA, MI, BO, RM2). Why??? Mah..
- The others must go through the following procedure:
  - I will request the unlock requests on the data base
  - I will communicate to the referees the requests and the motivations ( of all!!)
  - You will communicate the unlock request to your local CSN3 coordinator

Item		Keuro
SC/BM		10,00
DCH		70,00
Magnet 1		40,00
Magnet 2		50,00
Vertex/IT		110,00
DE/TOF		80,00
ECC		80,00
Calo/elect		300,00
crystals		250,00
daq/ computing		70,00
mecchanics		30,00
Detector		1090,00
	mission	210
	Data taking	50
total		1350



## Time, as usual

#### We have some deadlines/ milestones in front of us:

- 31th of may: application for beam time 2019/2020 at GSI
- 13<sup>th</sup> of June: CDR delivery to CSN3
- mid of July: funding requests for 2018 and FTE assignment
- End of July: test beam at CNAO calo/Start Counter / DE
- End of summer: test beam at LNS ECC / DE / pixel (?)

	Milestone	data	
1	Progetto definitivo dell'apparato	30 Giugno	
	sperimentale e scrittura CDR		
	Realizzazione del setup di simulazione	30 Giugno	
2	all'interno di un framework software		
	generale per il trattamento dati		
	dell'esperimento		
3	Realizzazione del progetto del DAQ	30 Novembre	
	dell'esperimento	30 NOVCITIBIC	
4	Scelta foto sensore di lettura per cristalli di	30 Novembre	
	BGO del calorimetro		
5	Test del dell'assottigliamento a 50 µm del	30 Novembre	
	chip M28		
6	Realizzazione del sistema di refreshing e	30 Settembre	
	test di calibrazione delle ECC		



#### Our physics program... still growing

- 1. Target fragmentation in proton therapy: fragmentation of  $^{12}$ C,  $^{16}$ O beam @ 150-200 MeV/nucl on C,  $C_2H_4$  and PMMA target. Inverse kinematic approach
- 2. Projectile fragmentation in particle therapy with  $^{12}$ C,  $^{16}$ O and  $^{4}$ He beams @ 300-350 MeV/nucl on C,  $C_2H_4$  target. Direct kinematic
- 3. Fragmentation study for radioprotection in space, in particular on spacecraft shield. He, C, O, (Si?) beams @ 400-700 MeV/u on different target (shield) materials, in particular on  $C_2H_4$  (maybe up to 1GeV/nucl? MC studies ongoing)
- 4. Measurement for PT monitoring:  $\beta^+$  emitters production (<sup>8</sup>B production ) from C,O on C @200-400 MeV/u; large angle fragment emission in C-C , C-O interaction @300MeV/nucl
- 5. ..? Any clues? Please, probe for possible measurements home!!



### Last news and.. let's go!

- We already had 2 FOOT test beams at Trento proton beam in December and May: Calorimeter/DE/SC
- We have with us representatives of the Aachen University, where they are developing a detector for the projectile fragmentation: we will hear about their experience.
- PG group is exploring a new technology for IT. Quest for improvement on physics, with known cost & time boundaries
- Very happy to be in Napoli and thanks a lot to the Napoli group.. The location is really impressive. Great expectation for the social dinner, but don't get used to that!!!
- Next meeting in late November? Where? (Bologna, Torino?)
- Have a nice meeting!!!!