# EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH



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CM-P00046240

CERN/SPSLC 95-73 SPSLC/P 284 add.1 14 November 1995

95-73 ADDENDUM TO THE DIRAC PROPOSAL

- 1. The DIRAC collaboration has been enlarged by the participation of new laboratories (CERN, Prague, Protvino and Trieste) and new members of the original teams (Santiago de Compostela). A total of 21 additional authors appear now in our list (see enclosure 1).
- 2. The sharing of responsibilities for work and finances has been defined (see enclosure 2).
- 3. A tentative time-schedule of the experiment has been prepared reflecting realistic availabilities of manpower and finances (see enclosure 3).

# Enclosure 1 EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH

CERN/SPSLC 95-1 SPSLC/P 284 15 December 1994 updated 10 November 1995

#### PROPOSAL TO THE SPSLC

# LIFETIME MEASUREMENT OF $\pi^+\pi^-$ ATOMS TO TEST LOW ENERGY QCD PREDICTIONS

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GENEVA 1994

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#### Enclosure 2

### Sharing of responsibility in the DIRAC proposal\*

#### I Experimental area

1.	Proton beam line ZT7		
	<ul> <li>experimental area and beam line</li> <li>iron for the beam catcher</li> <li>proton beam diagnostics</li> </ul>	PS CERN PS CERN PS CERN	375 kSF (300 kSF) <sup>†</sup> 40 kSF
2.	Secondary particle channel	JINR	$150~\mathrm{kSF}$
3.	Secondary channel shielding (40 tons of lead) and muon absorber (40 tons of iron)	PS CERN	(210 kSF) <sup>†</sup>
	Subtotal (excluding the already available materia	565 kSF	
II	Detectors with electronics		
1.	Scintillation fibre detector $(SciFi)^{\ddagger}$	CERN, Japan, Trieste	400 kSF
2.	Forward scintillation hodoscope $(FSH)$	CERN	55  kSF
3.	Microstrip gas chamber (MSGC)	Santiago	60  kSF
4.	Drift chamber system $(DC)$	JINR	$720~\mathrm{kSF}$
- 5	Horizontal hodoscopes $(HH_1 \text{ and } HH_2)$	JINR, IP(Prague),	1 <b>35</b> kSF
6	Vertical hodoscopes $(VH_1 \text{ and } VH_2)$	IHEP(Protvino),	235  kSF
7	Muon detectors ( $MU_1$ and $MU_2$ )	Santiago	115 kSF
8	. Cherenkov counters $(C_1 \text{ and } C_2)$	IAP(Bucharest), JINR, LNF-INFN, NPI(Moscow)	125 kSF
9	. Preshowers $(PS_1 \text{ and } PS_2)$	IAP(Bucharest)	85 kSF
	Subtotal	· · · · · · · · · · · · · · · · · · ·	1930 kSF

<sup>\*</sup>The financial attributions are only tentative because funds have not yet been allocated by the competent authorities

<sup>†</sup>These materials are already available †Other laboratories will participate in this work: LAPP, NPI(Moscow), IPN(Orsay) and IHEP(Protvino)

# III Trigger, DAQ and computer

1. Trigger system	CERN, JINR,	115 kSF 180 kSF		
2. DAQ	LNF-INFN, Japan,			
3. Host computer and software	NPI(Moscow), Santiago	50 kSF		
Subtotal		345 kSF		
Total		2840 kSF		

# Time schedule of the DIRAC experiment

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