



Lectures on Physics at DAΦNE

- R. Dalitz:
Hypernuclear Physics
- J. Gasser:
 χ - Perturbation Theory
- T. Kinoshita:
 $g-2$ of the muon
- L. Maiani:
CP and CPT violation

*A number of specialized seminars
on these and other ϕ factory
topics will also be given*

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INFN - LABORATORI NAZIONALI DI FRASCATI

LNF-96/030 (IR)

28 Giugno 1996

LNF SPRING SCHOOL IN NUCLEAR AND SUBNUCLEAR PHYSICS

Frascati, 15-20 April, 1996

To be held jointly with
IV EURODAΦNE
Collaboration Meeting



Technical Editor
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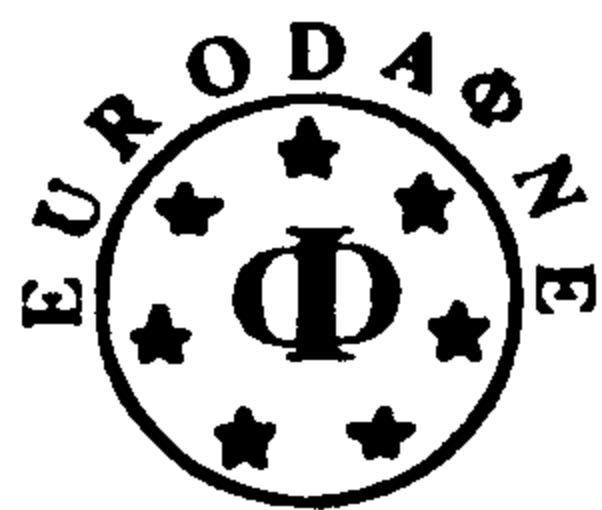
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LNF SPRING SCHOOL & IV EURODAΦNE Collaboration Meeting

Frascati April 15-20, 1996
New High Energy Building - Main auditorium

Program

MONDAY 15

09:00		Registration
09:30	L. Maiani	Opening
10:00	T. Kinoshita	$g-2$ of the muon (lecture n. 1)
11:30	<i>Coffee Break</i>	
12:00	F. Close	Meson spectroscopy
12:40	M. Pennington	Gluons stick together (recent issues in spectroscopy)
13:30	<i>Lunch</i>	
14:30	EURODAΦNE Collaboration Meeting (closed session)	
16:00	<i>Coffee Break</i>	
16:30	A. Courau	The Quasi-real Compton scattering for detector calibrations at DAΦNE
17:00	L. Ametller	$\gamma\gamma \rightarrow 3\pi$
17:30	E. Shabalin	Could the ratio ϵ'/ϵ be as large as few 10^{-3} ?

TUESDAY 16

09:30 **L. Maiani** CP/CPT violation (lecture n. 1)

11:00 *Coffee Break*

11:30 **T. Kinoshita** $g-2$ of the muon (lecture n. 2)

13:00 *Lunch*

Mini Workshop on $g-2$ of Charged Leptons (part I):

14:30 **F. Jegerlehner** Hadronic vacuum polarization contribution to $g-2$ of the leptons

15:00 **E. Remiddi** The analytical value of the 3 loop QED corrections to the electron ($g-2$)

15:30 **B. Krause** Electroweak two-loop corrections to the muon anomalous magnetic moment

16:00 *Coffee Break*

Mini Workshop on $g-2$ of Charged Leptons (part II):

16:30 **E. de Rafael** Comments on hadronic and electroweak corrections to the muon $g-2$

17:00 **S. Dubnicka** Hadronic contributions to the anomalous magnetic moment of charged leptons

17:30 **E. Pallante** Light-by-light scattering contribution to the muon $g-2$

WEDNESDAY 17

09:30 **L. Maiani** CP/CPT violation (lecture n. 2)

11:00 *Coffee Break*

11:30 **R. Dalitz** Hypernuclear Physics (lecture n. 1)

13:00 *Lunch*

- 14:30 **I. Mannelli** Experimental strategies for fixed target CP studies
 15:30 **M. Fabbrichesi** A new estimate of ε'/ε
- 16:00 *Coffee Break*
- 16:30 **G. D'Ambrosio** $K \rightarrow \pi\gamma\gamma$ decays: unitarity corrections, vector meson contributions and role for $K_L \rightarrow \pi^0 e^+e^-$
 17:00 **P. Privitera** Measurement of muon polarization in $K^+ \rightarrow \pi^0\mu + \nu$ at a ϕ -factory
 17:30 **A. Pugliese** Two-body decays and CP-violation in charmed mesons

THURSDAY 18

INFN Scientific Committee Open Session

- 09:30 **C. Biscari** Status Report on DAΦNE
 10:10 **T. Bressani** Status Report on FINUDA
 10:40 **A. Olin** Studies of KN scattering with FINUDA
- 11:00 *Coffee Break*
- 11:20 **P. Franzini** Status Report on KLOE
 12:00 **C. Guaraldo** Status Report on DEAR
 12:40 **N. Bianchi** Nuclear Physics at Foreign Laboratories
- 13:20 *Lunch*
- 14:30 **J. Gasser** Chiral Perturbation Theory (lecture n.1)
- 16:00 *Coffee Break*
- 16:30 **A. Pich** Tau/Charm Physics
 17:30 **M. Pennington** Extracting $\pi-\pi$ phase shifts from K_{e4}
- 20:30 *Social Dinner*

FRIDAY 19

09:30	J. Gasser	Chiral Perturbation Theory (lecture n. 2)
11:00	<i>Coffee Break</i>	
11:30	R. Dalitz	Hypernuclear Physics (lecture n. 2)
13:00	<i>Lunch</i>	
14:30	L. Nemenov	$\pi^+\pi^-$ atom and experimental test of exact CHPT predictions
15:00	J. Stern	Experimental signature of quark condensation
15:30	M. Knecht	Low energy $\pi-\pi$ scattering to two loops
16:00	<i>Coffee Break</i>	
16:20	G. Colangelo	Elastic $\pi-\pi$ scattering to two loops
16:45	G. Isidori	Radiative Four-Meson amplitudes
17:10	J. Portoles	The Chell-Olsson test vs CHPT
17:35	N. Achasov	Scope of production of four-quark states and K-K molecules at DAΦNE
18:00	Concluding Remarks	

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