
Introductory remarks

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Mini-Workshop on Neutral Kaon Interferometry:
from Quantum Mechanics to Quantum Gravity
Frascati - March 24th, 2006

KLOE data taking completed 10 days ago!
Total integrated luminosity: 2.5 fb^{-1}



INFN roadmap

Proposal to upgrade DAΦNE in luminosity (and energy):

DANAE

Energy and Luminosity Range

Energy @center of mass (GeV)	1.02	2.4
Integrated Luminosity per year (fbarn ⁻¹) >	10	1
Total integrated luminosity >	50	3
Peak luminosity > (cm ⁻² sec ⁻¹)	10 ³³	10 ³²

C. Biscari – DIF06

Expression of interest to upgrade KLOE at upgraded DAΦNE
(KLOE2)

Kaon physics

Neutral kaon interferometry

η, η' physics

Light scalars, $\gamma\gamma$ physics

Hadron cross section at low energy

- “Standard” analysis
- Decoherence and novel CPT violation in quantum gravity
- Open quantum dynamics
- CPT and Lorentz symmetry breaking
- Tests of quantum mechanics
- Bell’s inequality

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this workshop



Proceedings - handbook