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 (ftbarn ⁻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 DA Φ NE

(KLOE2)

Kaon physics

Neutral kaon interferometry

 η,η' physics

Light scalars, yy 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

Expression of interest to upgrade KLOE at upgraded DA Φ NE

(KLOE2)

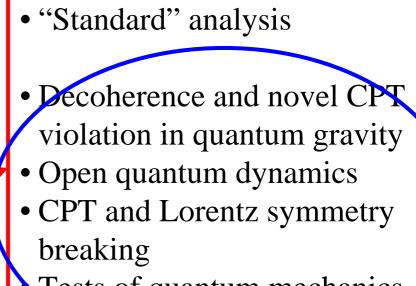
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this workshop

Proceedings - handbook