



ΓΕΝΙΚΟ ΣΕΜΙΝΑΡΙΟ ΤΜΗΜΑΤΟΣ ΦΥΣΙΚΗΣ

PHYSICS COLLOQUIUM

Thursday, 15 April 2010
17:00-18:00

3rd Floor Seminar Room

"Gravitational Wave Detectors"

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Abstract

Observation of tight binary systems has established the existence of gravitational radiation. However no signal has been detected on Earth yet. After introducing the principles of gravitational wave detection and the expected signals from various sources a description of the Virgo interferometer is given. Since July 2009 Virgo, in network with the two LIGO interferometers, has been collecting data. Data analysis of the interferometers and of data in coincidence with other observatories is illustrated. In the last part perspectives offered by the second generation (Advanced) detectors, now approved for construction are described.