## TIPP 2011 - 2nd International Conference on Technology and Instrumentation in Particle Physics



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## Probes of fundamental microphysics using intense photon beams

Thursday 9 June 2011 17:00 (30 minutes)

Laser cavities and interferometers are approaching MW beam power, enabling probes of new microphysics and of space-time itself at mass scales well beyond the TeV scale. I will discuss several applications currently being developed, including 1) a next-generation photon-axion oscillation experiment; 2) the Holometer–an experiment to detect Planck-suppressed space-time uncertainty; and 3) possible probes of zero-point contributions to the vacuum energy.

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