GWADW2021 Gravitational Wave Advanced Detector Workshop



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Light scattering noise in Cosmic Explorer

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Noise from laser backscattering and spurious beam couplings has been an important limitation in first and second generation detectors. In this talk we discuss the on-going design and experimental work for Cosmic Explorer, focusing on the modeling of light scattered by the mirror surface roughness, point defects and noise due to light scattered and diffracted/clipped by the arm cavity baffles.

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