

## **Enhanced Baffles for future Gravitational wave Interferometers**

The problem of mitigating scattered light noise within interferometer arm tubes has been addressed via the insertion of baffles that intercept the stray rays which after interacting with the tube walls may be reinjected in the Fabry-Perot resonator, carrying the vibrational noise of the walls. Such a problem has been dealt with conical, serrated, baffles that may still be source of noise due to diffraction at their edges. Recently, helical baffles have been proposed, showing that diffraction is reduced and mechanical construction easier, not needing serration.

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**Session Classification:** Poster session I

**Track Classification:** Scatter light for low frequencies