GWADW2023 - Gravitational-Wave Advanced Detector Workshop



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Towards birefringence mitigation

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To reduce thermal noise, KAGRA and 3G gravitational waves detectors will operate at cryogenic temperature. This requires the use of crystalline test-masses which could be birefringent. This birefringence leads to several issues from characterization to detector performances. We are now developping a quick method to measure and compensate birefringence as well as a new alignment control scheme that should allow to mitigate most of the birefringence issues.

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