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Mariner: The Cryogenic Upgrade of the 40m Prototype Interferometer

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“Mariner: The Cryogenic Upgrade of the 40m Prototype Interferometer”

LIGO Caltech operates a 40m prototype interferometer to validate interferometer technologies. Mariner is a prototype project of the 40m interferometer to be a prototype of Voyager, which is the cryogenic version of the LIGO interferometers. The Mariner interferometer employs cryogenic silicon test masses and a $2\mu\text{m}$ laser. This presentation will discuss the technical details of the Mariner interferometer.

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