GWADW2023 - Gravitational-Wave Advanced Detector Workshop



Contribution ID: 22

Type: Poster

Instrumented baffles for Advanced Virgo +

Tuesday, 23 May 2023 18:02 (1 minute)

As part of the upgrade program towards Advanced Virgo+ that started after the end of O3, instrumented baffles are being installed in the detector. These baffles are equipped with photosensors in order to monitor the distribution of scattered light in the cavities in real time and help with beam alignment. A first instrumented baffle was installed in the input mode cleaner (IMC) cavity in 2021 and is currently operational. Between O4 and O5, new, larger instrumented baffles will be installed around the end mirrors in the main arms. In this contribution we report results from the two years of operation of the IMC instrumented baffle, and present results from scattered light simulations used for the design of the new baffles, including their expected functionalities, progress in the construction and first tests of sensors.

Primary author: MACQUET, Adrian Presenter: MACQUET, Adrian Session Classification: Tuesday Poster session

Track Classification: Current detectors and prototypes: O5 and Post O5 plans