GWADW2021 Gravitational Wave Advanced Detector Workshop



Contribution ID: 154 Type: talk

Virgo Coatings Development in the Post-O5 timeline

Monday, 17 May 2021 10:20 (20 minutes)

The R&D activities on the A+ coatings are close to end. The coating recipe has to be confirmed in about 2 months and then it will be the time to optimize the coating deposition on full scale substrates. The legacy of this R&D period is full of new insights about the origin of thermal noise in coatings, less numerous are the insights on the origin of absorption in amorphous materials, but, anyway, the products of this new understanding are yet to come. R&D on coatings is all but over. New amorphous materials are becoming highly competitive with the crystalline ones, on the other hand growth technology and coating transfer for crystalline coatings are becoming competitive with the advanced status of amorphous coating technology. Time has come to make new planning for the coating R&D, compatibly with the Post-O5 timeline. The talk is focused on the Virgo point of view on how to upgrade the AdV+ coatings and how to prepare the road for ET

Primary author: CAGNOLI, Gianpietro (ILM-UCBL)

Presenter: CAGNOLI, Gianpietro (ILM-UCBL)

Session Classification: Recorded talks: Beyond Current Detectors

Track Classification: Advanced detectors: Beyond second generation