

Virtual Astronomy: eXtended Reality tools to support the design of astronomical instrumentation

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The technologies in the eXtended Reality (XR) field have been rapidly developing in the last few years, allowing for their effective implementation in several different applications, beside the entertainment world they are more commonly associated with.

Virtual, augmented and mixed reality environments can effectively support the various phases in the development of instrumentation for astronomy, with its ever-growing size and complexity, making them complementary tools to other methods of design verification and validation, like prototyping.

An actual immersion in an instrument that is still being developed can help considerably in identifying potential criticalities in the design, studying its interfaces, or evaluating integration and maintenance procedures. In the scope of the PNRR project STILES, an eXtended Reality laboratory is being implemented at the INAF Astronomical Observatory in Naples. It will be integrated inside an innovative Concurrent Design Facility, with the aim of providing a significant contribution in the optimization of the design process for the next generation of astronomical instrumentation.

sessioni congresso

Tecnologie avanzate e strumentazione

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