



SEMINARIO

# Development, Qualification and Application of a Thermal Protection PVD coating Designed for the Solar Orbiter Project

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A novel PVD coating was developed to be applied on critical parts that need thermal protection in the Solar Orbiter space probe. This probe will be located in an orbit close to the Sun that will involve extreme temperature and radiation during its service life. The developed coating was designed to achieve optimal thermo optical properties being also able to withstand the harsh conditions of up to 500 °C and the incoming radiation from the Sun. The qualification of the coating involved tests for evaluating UV, radiation, aging resistance, adhesion tests and electrical conductivity. The good values obtained for the developed coating resulted in its approval for applying on the Solar Orbiter probe.

