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## Small EUV brightenings in the quiet solar atmosphere: new insights from the Solar Orbiter mission

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Small scales EUV brightening in the solar atmosphere are observed everywhere and they have been classified following a variety of observational properties. For instance, they resemble small jets, bright dots or tiny loops. X-ray and EUV observations from the existing imagers, have been used to infer, for instance, the energy budget needed to heat the solar corona, as we expect the heating happening at small and impulsive way. EUV small scales brightenings have also been investigated as possible locations where the nascent solar wind escapes from the solar surface, as the result of small scale interchange-reconnections. These investigations have, however, not provided conclusive observational proofs to these phenomena.

The Solar Orbiter mission, launched in 2020, is providing opportunities for new insight into these problems, as it carries high temporal and spatial resolutions instruments accessing yet unresolved scales. In particular, EUI/HRIEUV telescope has revealed the existence of EUV brightenings down to the spatial resolution of 200 km and few seconds of lifetime, so extending our knowledge of these features to smaller scales. Their link to the photosphere is studied with the telescope PHI, which attains similar spatial resolutions.

In this talk, I will present and discuss these new observations. I will put them in the context of the present knowledge of the small scale EUV dynamical events, and I will discuss their possible link with the deepest regions of the solar atmosphere.

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