



Contribution ID: 28

Type: **Talk**

## Small-scale magnetic features as science drivers for high-resolution solar observations

*Wednesday 25 May 2022 14:30 (20 minutes)*

Mixed-polarity magnetic fields in the same resolution element of bi-dimensional solar images are known to produce an artificial magnetic flux cancellation. This effect often prevents us from investigating the rich dynamics of small-scale magnetic flux concentrations revealed by the sharpest observations of the solar atmosphere.

In this contribution, we report on a selection of science cases that can take advantage of diffraction-limited facilities equipped with adaptive optics in the context of solar observations, like the evolution of quiet-Sun magnetic elements and the fine structure of sunspot umbrae and penumbrae.

**Primary authors:** Dr DEL MORO, Dario (Università di Roma "Tor Vergata"); Prof. ZUCCARELLO, Francesca (Università degli Studi di Catania); Prof. BERRILLI, Francesco (Università di Roma "Tor Vergata"); Dr VIAVATTENE, Giorgio (INAF); Dr ERMOLLI, Ilaria (INAF); Dr GIOVANNELLI, Luca (Università di Roma "Tor Vergata"); Dr FALCO, Mariachiara (INAF); Dr MURABITO, Mariarita (INAF); Dr ROMANO, Paolo (INAF); Dr GUGLIELMINO, Salvo (INAF)

**Presenter:** Dr MURABITO, Mariarita (INAF)

**Session Classification:** Sessione 5