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Polarization signatures during the X1.6 flare observed in NOAA 12192

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The X1.6 flare observed on 22 October 2014 (SOL2014-10-22T14:28) was among the strongest flares occurred in the magnetically complex, great active region NOAA 12192. It was a confined flare, without an accompanying CME,despite the large amount of released energy.
In our work we attempt to deepen our understanding of the magnetic field configuration of the AR 12192. We analyzed the polarization signatures during the flare using spectro-polarimetric data acquired by the IBIS/DST instrument along the photospheric Fe I 617.3 nm and the chromospheric Ca II 854.2 nm lines in a time interval immediately following the peak of the X1.6 flare. The results obtained provided evidence of significant changes in the magnetic field configuration during the analyzed time interval.

Primary authors: Ms FERRENTE, Fabiana (Università degli Studi di Catania, Dipartimento di Fisica e Astronomia "Ettore Majorana"); Prof. ZUCCARELLO, Francesca (Università degli Studi di Catania, Dipartimento di Fisica e Astronomia "Ettore Majorana"); Dr GUGLIEMINO, Salvatore Luigi (INAF, Osservatorio Astrofisico di Catania); Dr ROMANO, Paolo (INAF, Osservatorio Astrofisico di Catania); Dr CRISCUOLI, Serena (NSO, National Solar Observatory, Boulder, CO, USA)

Presenter: Ms FERRENTE, Fabiana (Università degli Studi di Catania, Dipartimento di Fisica e Astronomia "Ettore Majorana")

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