Monitoring the magnetar SGR 1935+2154 with the MAGIC telescopes

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What is this contribution about?
In this contribution, we will show the results on the search for the very-high-energy counterpart of the first SGR-FRB source in a multiwavelength context, as well as the search for fast optical bursts with the MAGIC Central Pixel.

Why is it relevant / interesting?
The Galactic magnetar SGR 1935+2154 has been associated with a bright millisecond-timescale fast radio burst (FRB). It is the first FRB to be detected in the Galaxy and the first known source to be identified with an FRB. This contribution presents a monitoring multiwavelength campaign with the aim of studying this magnetar.

What have we done?
The MAGIC telescopes have monitored the Galactic magnetar SGR 1935+2154 in a multiwavelength campaign involving X-ray (Swift), radio (Westerbork and Onsala) and optical facilities (TNG). MAGIC has searched both for VHE gamma-ray emission and fast optical bursts.

What is the result?
No VHE emission has been detected with MAGIC. A detailed analysis for the search of burst-like fast optical burst events is still ongoing. Similarly, no radio bursts were reported by Westerbork or Onsala. Optical TNG/SiFAP2 observations could not identify any optical burst either. On the contrary, *Swift* reported several burst episodes on different nights.