

Script for ESOcast Light 235: Astronomers Image Magnetic Fields at Black Hole's Edge

ESOcast Light 235	
[Visual starts]	
New ESOcast intro	New ESOcast introduction
Title: Astronomers Image Magnetic Fields at Black Hole's Edge	
1. In 2019 the Event Horizon Telescope (EHT) released the first ever image of a black hole, the giant at the heart of the Messier 87 galaxy.	
2. Now, the EHT collaboration has revealed a new view of this massive object: how it looks in polarised light .	
3. Telescopes around the world — including ALMA and APEX, in which ESO is a partner — were linked to create a virtual Earth-sized telescope ...	
4. ...which, for the first time , has allowed astronomers to measure polarisation, a signature of magnetic fields, at the edge of a black hole.	
5. In the same way polarised sunglasses help us see better by reducing glare from bright surfaces... ...measuring polarisation helps astronomers sharpen their vision of the region around the black hole.	
5. The new view is key to understanding how magnetic fields allow the black hole to 'eat' matter and launch powerful jets .	
[Outro]	<i>Produced by ESO, the European Southern Observatory.</i>

Reaching new heights in Astronomy.