

Script for ESOcast Light 251: Uncovering a Black Hole in an Immense Dust Cloud

ESOcast Light 251	
[Visual starts]	
New ESOcast intro	New ESOcast introduction
Title: Uncovering a Black Hole in an Immense Dust Cloud	
<p>1. At the heart of the Messier 77 galaxy</p> <p>ESO's Very Large Telescope Interferometer has revealed a thick ring of dust hiding a black hole.</p>	
<p>2. The discovery has enabled new insights into active galactic nuclei (AGNs)...</p> <p>...confirming a 30-year-old theory – the Unified Model of AGNs.</p>	
<p>3. AGNs are powered by black holes and emit massive amounts of radiation, but they have different properties.</p>	
<p>4. The Unified Model says all AGNs have the same basic structure: a black hole surrounded by a dusty ring.</p> <p>We see different types of AGN depending on their orientation towards Earth.</p>	
<p>5. The team found that the ring of dust obscures the black hole in Messier 77 entirely, which explains why the galaxy's nucleus appears more subdued than others.</p>	

<p>6. <i>“Our results should lead to a better understanding of the inner workings of AGNs.”</i></p> <p>Violeta Gámez Rosas, Leiden University, the Netherlands</p>	
<p>[Outro]</p>	<p><i>Produced by ESO, the European Southern Observatory. Reaching new heights in Astronomy.</i></p>
	<p>Also interesting: https://www.youtube.com/watch?v=kjbM9FVIXOY and https://www.youtube.com/watch?v=WnpTO-LSufs</p>