

# ESOcast Light 181: Most Detailed Observations of Material Orbiting close to a Black Hole

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[Visual starts]	
New ESOcast intro	New ESOcast introduction
<b>Title: Most Detailed Observations of Material Orbiting close to a Black Hole</b>	
1. ESO's GRAVITY instrument has investigated the <b>supermassive black hole lurking at the centre of our Milky Way.</b>	
2. It spotted clumps of gas swirling around the black hole at about <b>30% of the speed of light.</b>	
3. If this gas was any closer in, it would be doomed to be <b>pulled beyond the event horizon...</b>	
4. ...vanishing <b>beyond the point of no return.</b>	
5. This is the <b>first time that material orbiting so close to a black hole has been seen in detail...</b>	
6. ...and <b>supports the long-standing assumption</b> that the object in the centre of our Milky Way is a supermassive black hole.	
<b>00:00</b> [Outro]	<i>Produced by ESO, the European Southern Observatory. Reaching new heights in Astronomy.</i>