

Our universe is a place of boundless night. It's filled with mysterious things that take cover in the unending darkness. If you watch carefully, you may see they even have a story to tell...	<i>Intro 1</i>
[Titles: "Haunted Universe: Trilogy of Terror"]	
Halloween is a time of ghosts and goblins. We can all see them sometimes, even astronomers. NASA's Spitzer Space Telescope is capable of peering into the infrared recesses of the universe and revealing dark things unseen in visible light. Tonight we present Spitzer's "Trilogy of Terror," a night gallery of haunting images that tell a tale of the lives, and deaths, of stars.	<i>[host, spooky backdrop, 3 floating "gallery" images]</i> Wide-Narrow-Wide
Our first exhibit takes us deep within the star fields of the constellation Sagittarius. What can <i>you</i> see lurking among the stars in the Galactic Plane? Does it call to mind a monstrous snake?	<i>Galactic snake, fades to snake cartoon</i>
This serpentine dust filament is about 11,000 light-years away and harbors quite a meal deep within its belly. Dr. Sean Carey first spotted this cosmic snake, and tells us about it and its impending case of indigestion.	<i>New zoom into snake image</i>
[comment about the size of the snake (big enough to swallow solar systems) and the massive star in its belly]	<i>[SCarey interview]</i>

We think of space as a total vacuum, but that's not entirely correct. The atoms and molecules are few and far between, but summed over dozens of light years they add up to a ghostly glow that Spitzer can see.	<i>[host]</i> Narrow-Wide
This ghoulish specter, known innocently as "DR 6" is a bit closer to home, just under 4,000 light-years away in the constellation Cygnus. It harbors a cluster of about 10 massive newborn stars, and gives us a hint about our galactic snake's fate.	<i>Ghost picture</i>
[comment about photoevaporation, hollowing out the eyes and destroying the surrounding dust]	<i>[SCarey interview]</i>
Sometimes our eyes, limited to the realm of the visible, aren't enough to see what's hiding in the shadows. Consider this region, which at a casual glance shows little beyond stars and an hourglass-shaped smudge.	<i>[host]</i> Wide
Spitzer's dust-piercing view lays bare what's lurking underneath. Dubbed the "Black Widow Nebula," this beast may show us a connection between spiders and snakes.	<i>Black Widow vis to IR fade</i>
[comment about stimulation of star formation]	<i>[SCarey interview]</i>
The snake, ghost, and spider have shown us different stages in the birth of stars, but coming full circle let's consider a star's demise.	<i>[host]</i> Narrow

Floating below the snake we see a red orb that's very much like the ghost of a long-dead star. At the end of its life it detonated in a violent supernova explosion. This blast wave marks its passing as a kind of cosmic trick or treat.	<i>Galactic snake zoom to SNR</i>
The nasty “trick” was the explosion that wiped out the star and its solar system...	<i>SN animation</i>
But the process also spreads heavy elements back into the galaxy. This “treat” helps form the next generation of stars and planets.	<i>Cas A image</i>
Looking for creepy creatures in the infrared sky is an astronomer's twist on ghost stories around the campfire. In facing these fears we can learn more about our universe too.	<i>[host]</i> <i>Wide</i>
For the Spitzer Science Center I'm Dr. Robert Hurt, reminding you there's a hidden, and sometimes haunted universe, waiting to be discovered.	<i>[host]</i> <i>Narrow</i>