



# Our Galactic Center

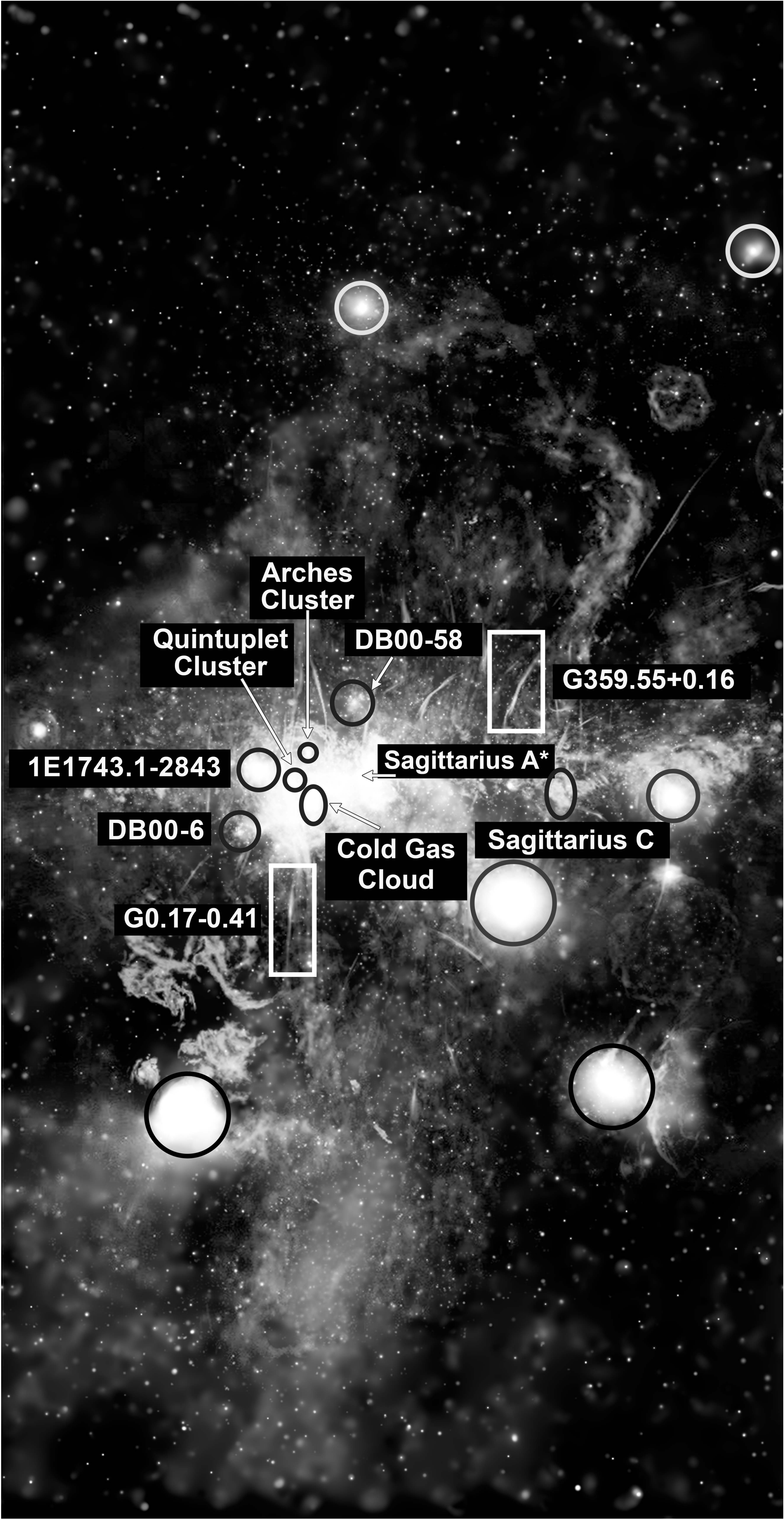
with NASA's Chandra X-ray Observatory



This stunning panoramic view of the center of the Milky Way shows the center of our Galaxy as never before. This view stitches together hundreds of separate images of NASA's Chandra X-ray Observatory to reveal exploded stars, superheated gas, black holes and more. Chandra's X-ray data were colored in orange, green, blue and purple to weave this magnificent galactic tapestry. This image stretches about 700 light years both above and below the center of the Milky Way, while extending about 500 light years to either side.

*Credit: X-ray: NASA/CXC/UMass/Q.D. Wang*





Threads of superheated gas and magnetic fields are weaving a tapestry of energy at the center of the Milky Way galaxy. A recent study of the X-ray and radio properties of this thread suggests these features are bound together by thin strips of magnetic fields. Both threads are labeled with dark grey rectangles in the above image. The newly studied one in the lower left, G0.17-0.41, is much farther away from the plane of the Galaxy.

A detailed study of these threads teaches us more about the Galactic space weather astronomers have witnessed throughout the region. This weather is driven by volatile phenomena such as supernova explosions, close-quartered stars blowing off hot gas, and outbursts of matter from regions near Sagittarius A\*, our Galaxy's supermassive black hole.

Also labeled in the main image are X-rays reflected from dust around bright X-ray sources (white circles along the outside area), Sagittarius A\*, and, in black circles and ellipses, the Arches and Quintuplet Clusters, DB00-58 and DB00-6, 1E 1743.1-28.43, the Cold Gas Cloud and Sagittarius C.