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Fermi/eRosita bubbles as relics of the past activity of Sgr A*

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Fermi bubbles and the newly discovered eRosita X-ray bubbles are gigantic bubbles above and below the Galactic center (GC) in the Milky Way Galaxy. Their symmetry suggests that they originate from energetic outbursts from the GC; however, whether it is linked to a nuclear starburst or black hole activity has been intensely debated. Here I present our recent results using 3D hydrodynamic simulations including relevant cosmic-ray physics and show that the multi-wavelength morphology and spectra of the Fermi/eRosita bubbles as well as the microwave haze could be simultaneously explained by past jet activity of the Sgr A* several Myr ago. I will also discuss the constraints derived from our simulations as well as the implications of the results.

Track

AGN

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