National Aeronautics and Space Administration

NASA

COSMIC PITCH

Zeta Ophiuchi is a star with a complicated past, having likely been ejected from its birthplace by a powerful stellar explosion.

Whether it's a ball rocketing toward the net or a star shooting across the cosmos, both soccer and space are full of motion, energy, and force. Cosmic Pitch connects the world's most popular sport to the physics of the universe.

On the field, players rely on data, angles, timing, and experience to predict where the ball will go next. Scientists use telescopes to see different forms of light including radio, infrared, visible ultraviolet, X-ray, and gamma-ray light. Each type of light, captured by different telescopes such as NASA's Chandra X-ray Observatory, James Webb Space Telescope or Solar Dynamics Observatory, reveals something new about the cosmos.

From the spin of a curving free kick to the forces swirling around a black hole, the science on the field echoes across galaxies. As the world takes the field, see what happens when science is in play.

nasa.gov
chandra.si.edu/cosmicpitch

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