

## News

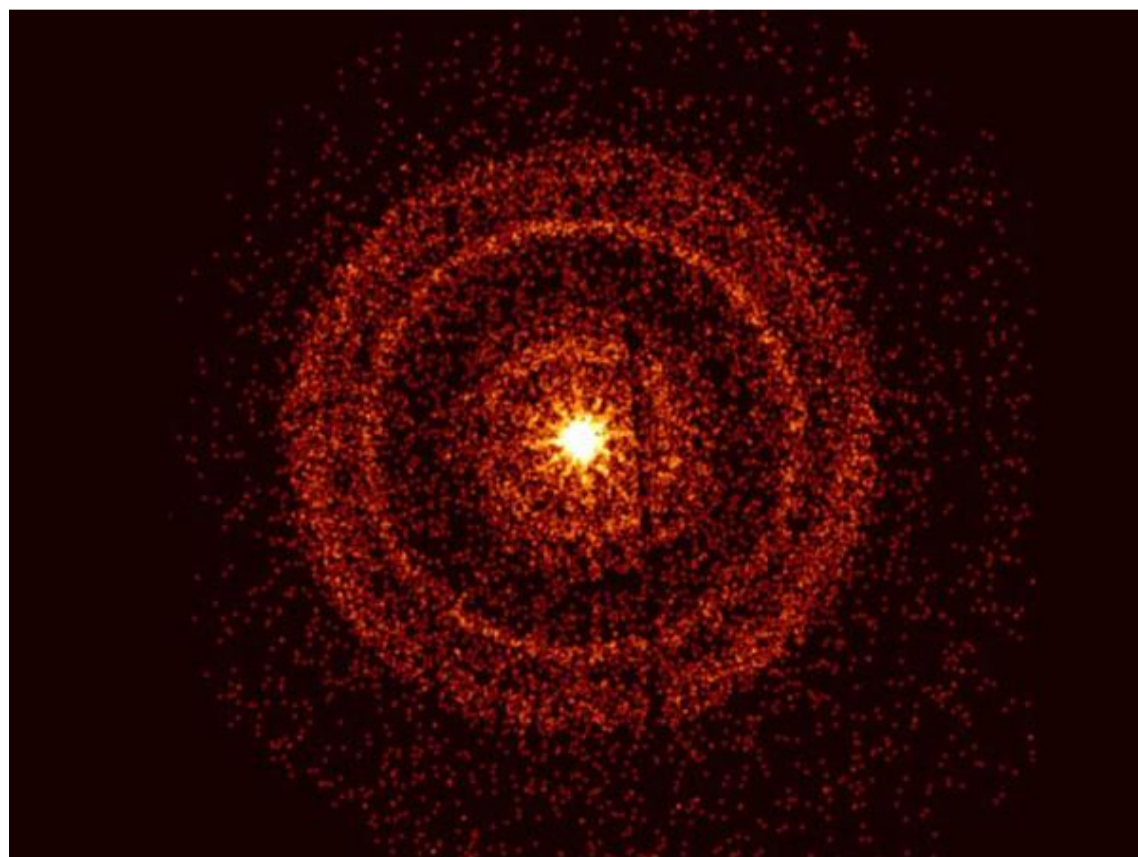
# Swift telescope captures brightest gamma-ray burst ever recorded



2 November 2022

On October 9, 2022, an unusually bright and long-lasting gamma-ray burst—the most powerful type of explosion in the universe—was detected by the Neil Gehrels Swift Observatory, whose **Mission Operations Center** is located at Penn State and led by Professor of Astronomy and Astrophysics **John Nousek**. The burst—the **brightest ever recorded**, called GRB 221009A—originated from the death of a massive star about two billion light years away, likely collapsing to form a black hole and sending gamma rays, X-rays, and other particles into space.

A striking image of the burst's afterglow was captured by Swift's X-Ray Telescope, which is led by Penn State Research Professor of Astronomy and Astrophysics **Jamie Kennea** and was originally built under the leadership of Professor of Astronomy and Astrophysics **David Burrows**. Swift and other observatories are continuing to observe the aftermath of the event, which could help provide new insights into stellar collapse, the birth of a black hole, and the conditions in distant galaxies.



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