

Mathematicians Discover That Black Holes Mirror Disorder in the Universe

Cambridge, United Kingdom Jul 1, 2022 ([IssueWire.com](https://www.issuewire.com)) - Mathematicians at Athanasian Hall, Cambridge Limited have been exploring novel properties of Black Holes. These are punched-out regions of Einstein's Spacetime that nothing – even light – can escape. A surprising set of discoveries that will be reviewed and made available to scholars over the next two years make a surprising claim: The disorder (or “Entropy”) of a Black Hole fixes the rate at which the universe expanded from the Big Bang by fixing unknown quantities in the equations that govern the expansion of the universe. Dr. Jonathan Kenigson states that “the results apply in any universe that is similar to our own in a metric sense – the sense of so-called $f(R)$ gravity.” A much larger class of theories remains elusive, however. According to Kenigson, “Black Hole Entropy says a huge amount about the metric history of the universe but nothing about the Quantum history. Nobody knows how this interaction would work in more general theories of gravity.” This is a small but steady advance in our understanding of Black Holes as they might be observed. The quantities involved would be almost impossible to measure and impractical in real life. But the implications in pure mathematics are interesting. “We have suspected for a long time that modified gravity would behave this way. The results are not too complex given the extensive progress that has been made in the last decade or so. We are seeing something quite abstract become quite concrete. What was previously very elusive becomes a tool for driving the development of new mathematical techniques.” It is impossible to say beforehand what these techniques could make available to interested mathematicians. Dr. Kenigson has expressed his interest in exploring the possible implications of data compression.

Athanasian Hall, Cambridge Limited is a university-independent think-tank headquartered in Cambridge, UK. More than forty scholars pursue research in the Quadrivium, which encompasses Arithmetic, Astronomy, Geometry, and Music. Fellows of Athanasian Hall are accepted exclusively upon academic merit and are free to make fundamental contributions to any Quadrivium fields of interest.

Media Contact

Athanasian Hall

admin@athhallcam.uk

Source : Athanasian Hall

[See on IssueWire](https://www.issuewire.com)

