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978-1-107-03918-6 - Revealing the Heart of the Galaxy: The Milky Way and Its Black Hole

Robert H. Sanders

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Revealing the Heart of the Galaxy

Written in an informal and engaging style, this volume traces the discoveries that led to our understanding of the size and structure of the Milky Way, and the conclusive evidence for a massive black hole at its center. Robert H. Sanders, an astronomer who witnessed many of these developments, describes how we parted the veil of interstellar dust to probe the strange phenomena within. We now know that the most luminous objects in the Universe – quasars and radio galaxies – are powered by massive black holes at their hearts. But how did black holes emerge from being a mathematical peculiarity, a theoretical consequence of Einstein's theory of gravity, to become part of the modern paradigm that explains active galactic nuclei and galaxy evolution in normal galaxies such as the Milky Way? This story, aimed at nonspecialist readers and students and historians of astronomy, will both inform and entertain.

ROBERT H. SANDERS is Professor Emeritus at the Kapteyn Astronomical Institute of the University of Groningen, the Netherlands. Author of *The Dark Matter Problem: A Historical Perspective* (Cambridge, 2010), Sanders has spent his career studying the orbit structure in barred galaxies, active galactic nuclei, and the problem of the mass discrepancy in galaxies. He received his Ph.D. in astrophysics from Princeton University.

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