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John Wheeler, 1976 - 1996: Law Without Law and Quantum Information

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John Archibald Wheeler moved to Austin, Texas in the summer of 1976. With the change of University came a shift in emphasis, from general relativity in Princeton to the foundations of quantum theory in Texas. As before, Wheeler was a “radical conservative”, asking far out questions, and pushing the known laws of physics to their breaking point on the way to an answer or – better yet – to a deeper conundrum. As always, his ideas were original, bold, and profound. As usual, Wheeler exerted his greatest influence through students and junior colleagues he inspired. The delayed – choice experiment he suggested is one example of “radical conservatism”. It dramatically illustrates the role of the observer in defining a “phenomenon” – in determining what happens (or even what has already happened!) in quantum theory. Wheeler’s interest in the foundations of quantum theory and its relation to information (emphasis that echoed Bohr’s views of quantum states) pre-saged development of what is now known as the physics of information.