Preface

In our book, *Quantum Enigma: Physics Encounters Consciousness*, every experimental result we describe is undisputed. And our explanation of them with quantum theory is standard. We reported some contending interpretations of what quantum mechanics might be telling us, but we offered no speculation of our own.

We’ve both recently retired from our academic positions, and thus from daily contact with our intellectually conservative physics colleagues. Our facing up to the enigma displayed by quantum experiments can now be uninhibited. We might therefore try to *address* the quantum measurement problem, not just present it.

Hendrik Casimir, a distinguished 20th century Dutch physicist, once mused: “Sometimes it almost appears that the theories are not a description of a nearly inaccessible reality, but that the so-called reality is a result of the theory.”

Taking this musing seriously seems absurd. However, doing so seems only a little more absurd than our general acceptance of a Copenhagen interpretation of quantum mechanics, in which the “free choice of the experimenter” *creates* the properties, and histories, of objects. Or it is little more absurd than the sometimes acceptance of a Many-Worlds interpretation, in which many of us are created at every observation.

In this book, *The Casimir Speculation*, after a brief look at the historical emergence of quantum theory, we explore what it might be telling us about the world—and about us. Our speculation here is wild. We suggest that an extension of well-established physics might encompass the human mystery basic to the quantum measurement problem.

“It’s crazy, but not crazy enough!” was Niels Bohr’s response to a proposed resolution of the quantum measurement problem. The Casimir Speculation might just be crazy enough.

In the closing pages of *Quantum Enigma*, commenting on Casimir’s musing, we wrote: “Though taking an idea like this literally is surely ridiculous, the quantum enigma can motivate outrageous speculation.” Back then we hinted at what we now speculate.

*There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy.*

-- Shakespeare, *Hamlet*