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Henning Hohnhold* (hhohnhol@math.ucsd.edu), University of California, San Diego (UCSD),
9500 Gilman Drive, Dept 0112, La Jolla, CA 92093-0112. *K-theory and supersymmetric QFTs*.

In their survey paper "What is an elliptic object?" Stephan Stolz and Peter Teichner explained the relationship between supersymmetric quantum field theories of dimension $(1-1)$ and K-theory. Since then, our understanding of the formalism has evolved, resulting in cleaner definitions and proofs. I will briefly explain the basic notions and how the resulting new model for the K-theory spectrum relates to classical models (e.g. those of Milnor and Atiyah-Singer). Time permitting, I will explain some of the $(2-1)$ dimensional analogues, conjecturally related to elliptic cohomology. This is joint work with Stephan Stolz and Peter Teichner. (Received September 19, 2007)