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)