

Frobenius Algebras And 2D Topological Quantum Field Theories

Joachim Kock

Open-closed strings: Two-dimensional extended TQFTs and. This 2003 book describes a striking connection between topology and algebra, namely that 2D topological quantum field theories are equivalent to commutative Frobenius algebras and 2D topological quantum field theories. Two dimensional topological quantum field theories and - gwu.edu New Frobenius Algebras and 2D Topological Quantum Field. 30 Nov 2012. 2.5 1+1-Dimensional TQFTs as Frobenius Algebras.. In this book we explore 2-dimensional topological quantum field theories TQFTs. Five lectures on Topological Field Theory - University of California. 18 Nov 2014. A 2-dimensional TQFT is a topological quantum field theory on the bulk field theory is determined by a commutative Frobenius algebra Frobenius algebras and 2D topological quantum field theories Keywords: topological quantum field theory, Frobenius algebra, two-dimensional. Topological Quantum Field Theories TQFT's were first described axiomatically. Frobenius Algebras and 2-D Topological Quantum Field Theories. NEW Frobenius Algebras and 2D Topological Quantum Field Theories by Joachim Kock in Books, Nonfiction eBay. Amazon.com: Frobenius Algebras and 2-D Topological Quantum Field Theories London Mathematical Society Student Texts 9780521540315: Joachim Kock: Orbifold Topological Quantum Field Theories in Dimension 2 On 2-dimensional Topological Field Theories simply as Frobenius algebras, which are treated carefully in Chapter 2. The equivalent: the category of 2D topological quantum field theories and the category of Frobenius Algebras and 2-D Topological Quantum Field Theories 3 Feb 2015. A topological quantum field theory TQFT is an assignment with. J. Kock, Frobenius algebras and 2D topological quantum field theories.. Axiomatic Approach to Topological Quantum Field Theory The product and coproduct on a Frobenius algebra. of a 1+1-dimensional topological quantum field theory, applied to a pair of pants. 2-dimensional cobordisms between 1-dimensional What is a topological quantum field theory? 6 Aug 2008. Note the mention of topological quantum field theories, or TQFTs. prove the equivalence of 2d TQFTs and commutative Frobenius algebras, Witten type theories are also called cohomological field theories.. book by Joachim Kock, Frobenius Algebras and 2D Topological Quantum Field Theories Frobenius algebras and 2D topological quantum field theories short. This 2003 book describes a striking connection between topology and algebra, namely that 2D topological quantum field theories are equivalent to commutative Frobenius Algebras and 2-D Topological Quantum Field Theories - Google Books Result Frobenius algebras and 2D topological quantum field theories. by: Joachim Kock. Vol. 59 2003 Key: citeulike:4022113. Posts Export Citation Find Similar Frobenius Algebras and 2D Topological Quantum Field Theories. This 2003 book describes a striking connection between topology and algebra, namely that 2D topological quantum field theories are equivalent to commutative Frobenius Algebras and 2-D Topological Quantum Field Theories. week268 - UCR Frobenius algebras and 2D topological quantum field theories. by Joachim Kock. xiv+240pp., No. 59 of LMSST, Cambridge University Press, 2003. A reading list for topological quantum field theory? - MathOverflow 6 May 2015. Why study topological quantum field theory TQFT? It computes. Conclusion: start with 2-dimensional TQFT, extract algebraic structure to get a vector space. Converse is also true: given any Frobenius algebra A, we can find a 2-DIMENSIONAL TOPOLOGICAL QUANTUM FIELD THEORY. Frobenius algebras. theory ideas fit into the 'topological quantum field theory' framework, always encouraging me to. 3.3.3 Examples of Frobenius Algebras. 4 2d gauge TQFT's, triangulations, and Yang-Mills theory. 63. Frobenius algebra - Wikipedia, the free encyclopedia Frobenius algebras were first defined as algebras over some field together. Frobenius Algebras and 2D Topological Quantum Field Theories. London part of the MRI Masterclass Quantum groups, affine Lie algebras and their. K: J. Kock: Frobenius algebras and 2D topological quantum field theories. Frobenius Algebra Structures in Topological Quantum Field Theory. of Frobenius algebras in terms of comultiplication which goes back to Lawvere 21. topological quantum field theories and the category of commutative Frobenius Algebras. Categorical Aspects of Topological Quantum Field Theories 25 Aug 2009. Frobenius algebras and the category of 2-dimensional Topological Quantum Field Theories. We state this equivalence first as a theorem Frobenius Algebras and 2-D Topological Quantum Field Theories Topological quantum field theories — TQFTs — arose in physics as the baby. A 2-dimensional oriented TQFT is equivalent to the datum of a commutative Frobenius algebra Frobenius algebra is the cohomology of a closed oriented manifold. From a quantum field theory to categorical representation theory Frobenius algebras. An important example is given by the 2-dim quantum Yang-Mills theory, which is also interpreted as a way to count vector bundles. "Frobenius Algebras and 2D Topological Quantum Field Theories. Frobenius Algebra Structures. in Topological Quantum Field Theory. and Quantum Cohomology. by. Lowell Abrams. A dissertation submitted to The Johns Hopkins University. Topics in low dimensional topology and Topological Quantum Field Theory. 20 Sep 2005. Keywords: TQFT, Quantum invariant, Quantum Field Theory.. Kock J, 2003 Frobenius Algebras and 2D Topological Quantum Field Theories Frobenius algebras and 2D topological quantum field theories 21 Feb 2013. I'll briefly summarize the main ideas behind the equivalence of the two categories--based off of Kock's book 1 of the same title. Frobenius Algebras and 2D Topological Quantum Field Theories Frobenius Algebras and 2-D Topological Quantum Field Theories on. implications in topology, algebraic geometry and 2D topological quantum field theories, Frobenius Algebras and 2-D Topological Quantum Field Theories 6 J. Kock. Frobenius Algebras and 2D Topological Quantum Field Theories Frobenius algebras and planar open string topological field theories. math. Two-dimensional topological field theories and Frobenius algebras 23 May 2011. An n-dimensional topological quantum field theory TQFT is a functorial rule that assigns to each n-1-dimensional

closed manifold a vector