

Integral structures in TQFT

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Abstract : Quantum invariants of 3-manifolds are often algebraic integers. P. Gilmer and I have used this to define integral structures on the Topological Quantum Field Theories associated with these invariants. In my lectures I will try to explain how this works for the $SO(3)$ -theories at odd primes, where everything can be understood quite explicitly using the skein-theoretical approach.