

1111-81-40

Christoph Schweigert* (christoph.schweigert@uni-hamburg.de), Bereich AZ, Fachbereich Mathematik, Bundesstrasse 55, 20146 Hamburg, Germany, and **Jurgen Fuchs**, Universitetsgatan 21, 65188 Karlstad, Sweden. *Symmetries and defects in three-dimensional topological field theory.*

Boundary conditions and defects of any codimension are natural parts of any quantum field theory. Surface defects in three-dimensional topological field theories of Turaev-Reshetikhin type have applications to two-dimensional conformal field theories, in solid state physics and in quantum computing. We explain an obstruction to the existence of surface defects that takes values in a Witt group. We then turn to surface defects in Dijkgraaf-Witten theories and their construction in terms of relative bundles; this allows one to exhibit Brauer-Picard groups as symmetry groups of three-dimensional topological field theories. (Received January 09, 2015)