1106-81-1747 Marcel Bischoff* (marcel.bischoff@vanderbilt.edu), Vanderbilt University, Department of Mathematics, Nashville, TN 37203, and Yasuyuki Kawahigashi, Roberto Longo and Karl-Henning Rehren. Subfactors and Topological Defects in Conformal Quantum Field Theory.

Models in relativistic quantum field theory can be described by so-called local nets of von Neumann algebras. Rich structures arise by the study of conformal QFT on two-dimensional space time. We introduce the notion of topological defects between such theories. Given a completely rational conformal net \mathcal{A} on the circle, we give a classification of all full conformal QFT models based on \mathcal{A} and its topological defects in terms of the data in the representation category of \mathcal{A} . The result is obtained and can naturally be formulated in terms of braided subfactors and tensor categories. (Received September 15, 2014)