1046-20-1762   **Hendryk Pfeiffer*** (`pfeiffer@math.ubc.ca`), Department of Mathematics, The University of British Columbia, 121-1984 Mathematics Road, Vancouver, BC V6T 1Z2, Canada. *Every modular category is the category of modules over an algebra.*

How do you categorify a modular category? Some modular categories can be obtained from quantum groups $U_q(\mathfrak{g})$, q a suitable root of unity, by studying the category of tilting modules and by taking its quotient modulo the 'negligible' morphisms. This approach has two drawbacks. First, not every modular category is known to be of this form. Second, the construction is technically difficult and not very transparent because it involves a quotient of the category of tilting modules.

I show how *every* modular category can be obtained as the category of modules over an algebra with extra strucure. There is no need for any quotient. I also explain how the combinatorial 3-manifold invariants can be rephrased in the language of these algebras. (Received September 16, 2008)