1100-57-170Yu Tsumura* (ytsumura@math.purdue.edu), 400 N River Rd Apt 1435, West Lafayette, IN
47906. A 2-categorical extension of the Reshetikhin-Turaev theory.

I will discuss a concrete construction of a 2-categorical extended topological field theory that extends the Reshetikhin-Turaev TQFT. An extended TQFT is defined to be a 2-functor from a 2-category of cobordisms with corners to the Kapranov-Voevodsky 2-vector spaces. As an intermediate 2-category between these 2-categories, a 2-category of special ribbon graphs is introduced. (Received February 07, 2014)