

1152-55-218

**Norio Iwase\*** ([iwase@math.kyushu-u.ac.jp](mailto:iwase@math.kyushu-u.ac.jp)), Faculty of Mathematics, Kyushu University,  
Motoooka 744, Fukuoka, Fukuoka 819-0395, Japan. *Upper bound for monoidal topological  
complexity.*

We show  $\text{tc}^M(M) \leq 2 \text{cat}(M)$  for a finite simplicial complex  $M$ . For example, we have  $\text{tc}^M(S^n \vee S^m) = 2$  for any positive integers  $n, m$ . (Received September 04, 2019)