

1052-18-33

Mark Hovey* (mhovey@wesleyan.edu), Department of Mathematics, Wesleyan University,
Middletown, CT 06459. *Watts' theorems and Brown representability for derived categories.*

Watts' theorem in algebra determines which functors from $\text{Mod } R$ to $\text{Mod } S$ are tensor products. We prove an analogous theorem for functors from the triangulated derived category $D(R)$ to $D(S)$. In particular, we partially salvage the failure of Brown representability for homology functors on $D(R)$. (Received July 27, 2009)