

Abstract Submitted  
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**Is Sound a Property of Space or Vacuum?** VENKATA CHAGANTI,  
Department of Physics, University of Texas, El Paso — Absolutist regards SPACE  
as an entity in its own right with properties of its own. Further more, relationists,  
scientists and laymen attribute many different sorts of properties to SPACE. In  
fact, we are able to distinguish every material from the other by its properties.  
We all know that SPACE is attributed by some of the properties listed below. 1.  
Electromagnetic Properties like permittivity and permeability. 2. Empty SPACE  
is a poor conductor. 3. Empty SPACE is transparent. 4. SPACE is penetrable by  
any particle / material. 5. SPACE is incapable of action. 6. SPACE is immovable.  
7. SPACE is infinite. 8. SPACE is isotropic. 9. All bodies are place in SPACE. 10.  
SPACE is Isotropic. And many more properties can be made quite precise without  
any reference to an embedding space surrounding the SPACE of interest. SPACE  
as a physical object only makes sense if it can be detected, or if it can exert physical  
influences. Does the motion of an object through SPACE lead to detectable effects?  
Can SPACE act on a moving body in the way that the sea acts on a moving fish? In  
this paper an attempt is made to show that SPACE is indeed like any other medium  
/ material and also SOUND is its property. Statistical Mechanics is used as a tool.

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