

1079-35-125

Daniel T Onofrei* (onofrei@math.uh.edu) and **Kui Ren**. *Active manipulation of acoustic fields and applications.*

The idea of active manipulation of fields initially originated in the works of Guevara Vasquez, Milton and Onofrei for the problem of acoustic cloaking.

In this talk we will show that the cloaking problem studied before is a particular case of a more general first kind integral equation and we will study this new general problem. We will discuss about the existence of solutions, stability of the associated minimal energy solution and the possibility to control the near field of the minimum energy solution. (Received January 04, 2012)