

Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-05-1505 **T. S. Michael*** (tsm@usna.edu), Mathematics Department, United States Naval Academy, Annapolis, MD 21402, and **Richard J. Bower**. *When Can You Pack a Box With Translates of Two Bricks?*

We give necessary and sufficient conditions for a rectangular box to be packed by translates of two given rectangular bricks in d dimensions. When restricted to 2-dimensional rectangles with integer edge lengths, our characterization includes several known tiling theorems and answers a question of Erdos. (Received October 05, 2004)