## ACOUSTICS2008/2146 Characterising a washing machine as a structure borne sound source on a lightweight floor

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The transfer of structure borne sound power depends on the mobility of the source and the receiver. If source and receiver are coupled through multiple points, the interaction between those points has to be accounted for. The force of a washing machine injected into a lightweight wooden floor is analysed to develop a simple measurement procedure for similar multiple point structure borne sound sources. A complete mobility model will be compared with a simplified model based on a reduced mobility matrix. The importance of different matrix components will be determined. Receiver structures used in real buildings will be investigated.