

DISCUSSION OF "Wave Propagation and Lumped Mass Analysis Techniques Applied to the Determination of the Response of Multiple Layered Systems to Sinusoidal and Seismic Excitation" by J H Travers and R Shepherd, paper 36, Session 1D: Dynamics of Soils and Soil Structures

by  
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Radiation damping into rock can be precisely simulated in lumped-mass analysis by assuming that there is a dashpot between the rigid support that represents rock and the lowermost pair of spring and dashpot elements in the soil.<sup>(1,2)</sup> The dashpot constant is  $\sqrt{\mu\rho}$  per unit area of interface, where  $\mu$  and  $\rho$  are the modulus of rigidity and density of bedrock.

#### REFERENCES

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2. N M Newmark and E Rosenblueth, Fundamentals of Earthquake Engineering, Prentice-Hall, Inc, Englewood Cliffs, N J, 1971, 77.

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