Meeting: 1006, Lubbock, Texas, AMS CP 1, Session for Contributed Papers

Philip R Brown\* (brownp@tamug.edu), P.O.Box 1675, Galveston, TX 77553. Mapping of Radial Slit Domains and the Fundamental Frequency of a Drum.

New Formulas are used for computing the univalent mapping of the unit disc onto a radial slit domain with threefold symmetry. A new upper bound is given for the universal constant which determines the lowest tone a membrane can produce if it contains a circular membrane with a specified radius. (Received February 04, 2005)