KOLLOQUIUM

Institut für Elektrotechnik, Elektronik und Informationstechnik

Wave Propagation in Porous Media

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Cauerstraße 7/9, Hörsaal H5

Diskussionsleitung: Prof. Dr.-Ing. Reinhard Lerch

Elastic wave propagation in porous media will be introduced by a discussion of scattering to show the use of broad frequency band pulses in relating the attenuation, velocity and backscattering to information on porosity. Examples will be given for microporosity in castings and powder metal components. This will be followed by a discussion of the influence of volatiles within the pores on the absorption of elastic waves in porous ceramics and rocks. Implications of these findings will be given for ultrasonic device applications and for the interpretation of the lunar seismic experiments carried out as part of the Apollo missions to the moon.