

# A mathematical description of the distribution of pores in a strained, elastic solid

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Nowadays it is well known that the process of fracture has visible latent phases. The investigation of a latent phase can be carried out on the base of thermodynamical relations and the theory of multiphase media. The main problem are poras, defect transfer and distribution. This report proposes a system of nonlinear differential equations for the temperature and the poras-density and demonstrates the investigation of aprori mathematical properties of the solution. The simplest calculations of the above mentioned problems are shown in the conclusion.