

Invasion Percolation on Fracture Networks

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The aim of this Bachelor thesis is to investigate flow in fracture networks. The study of flow in fractured media is of practical interest especially for radioactive waste or carbon dioxide repositories located in hard rock. This work will therefore lay special focus on the leakage of underground waste repositories through discrete fracture networks. Critical leakage paths are identified with the use of invasion percolation and their permeabilities and apertures are calculated on a representative volume element.

