## **Accepted Manuscript**

A Fuzzy Logic Based Algorithm For Defining and Extracting Pore Network Structure From Tomography Images of Rocks

A. Moaddel, D. Müter, R. Gooya, H.O. Sørensen, S.L.S Stipp

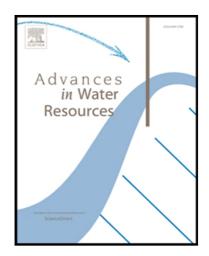
PII: \$0309-1708(17)30846-1

DOI: 10.1016/j.advwatres.2018.07.011

Reference: ADWR 3168

To appear in: Advances in Water Resources

Received date: 30 August 2017 Revised date: 13 July 2018 Accepted date: 17 July 2018



Please cite this article as: A. Moaddel, D. Müter, R. Gooya, H.O. Sørensen, S.L.S Stipp, A Fuzzy Logic Based Algorithm For Defining and Extracting Pore Network Structure From Tomography Images of Rocks, *Advances in Water Resources* (2018), doi: 10.1016/j.advwatres.2018.07.011

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

#### ACCEPTED MANUSCRIPT

### **Highlights:**

- The definition of a pore is vague and arbitrary. To make sense of pore network models and pore related quantities (pore size distribution, pore coordination number, throat size distribution), a quantifiable definition of a pore is needed.
- We applied fuzzy logic to tackle the issue of quantifying the pore as an entity in a porous medium and tested it on a variety of rock types, using tomography images.
- By using a plot of information content of pore coordination number distribution, it is possible to cluster different rocks.



#### Download English Version:

# https://daneshyari.com/en/article/8883257

Download Persian Version:

https://daneshyari.com/article/8883257

<u>Daneshyari.com</u>