

Interactive comment on “A particle based model for soil water dynamics: how to match and step beyond Richards’ equation?” by E. Zehe and C. Jackisch

Anonymous Referee #2

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The authors compare two random walk approaches to simulate Richard’s equation. One is straightforward (called naïve) and the author is based on the fact that particles are distributed among the different capillary tubes given by the retention curve. The latter is a nice approach worth of publication. I am missing technical details on the applicability of these two methods in the paper in regards to the gradient of dispersion. I do not see how it is estimated. Also, an explanation of why the first method does not work. In theory, one should expect that the naïve method works for vary large number of particles? What are we missing here? Please, explain exactly how the two methods are implemented step by step.

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