1023-35-1376 **Guillermo H Goldsztein*** (ggold@math.gatech.edu), School of Mathematics, Georgia Tech, Atlanta, GA 30332. Solute transport in porous media.

We study the transport of solutes in saturated porous media. We restrict our attention to media that consist of interconnected thin channels and periodic microgeometry. We develop a method to compute the macroscopic transport properties in terms of the microgeometry and the flow field within the media. (Received September 25, 2006)