Subdiffusion in a system consisting of two different media

Wednesday, 6 September 2017 12:00 (15 minutes)

We consider subdiffusion in a system which consists of two homogeneous media joined together; subdiffusion parameters can be different in both media [1,2]. We also consider subdiffusion with absorption in a composite system. The application of the theoretical model to describe a real diffusion processes in the considered system is also presented. Confronting the theoretical formulas with the experimental data we estimate subdiffusive parameters of colistin in aqueous agarose solution and we show the subdiffusive character of colistin transport in the gel.

[1] T. Kosztołowicz, Int. J. Heat Mass Transf. 111, 1322 (2017).
[2] T. Kosztołowicz, J. Chem. Phys. 146, 084114 (2017).

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