The Continuum Hypothesis in Rainfall and the Effects of Drop Clustering on Pollutant Scavenging

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Applying the continuum hypothesis to raindrops, a 3D-Poisson distribution of drops in space would be obtained. However, experimental work has established the existence of clustering effects, probably originating in the turbulent fluctuation structure of the atmosphere, and displaying a multifractal behaviour. In view of these findings, the present work elaborates on the theoretical influence of multifractal clustering in the drop distribution on pollutant scavenging by the raindrops.