

Two-step method for assessing similarity of realisations of random sets

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The talk concerns a new statistical method for assessing similarity of two random sets based on one realisation of each of them. The method focuses on shapes of the components in the given realisations, namely on the curvature of their boundaries together with the ratios of their perimeters and areas. Theoretical background is introduced and then, the method is described, justified by a simulation study and applied to real data of two different types of tissue - mammary cancer and mastopathy.