How Complex is a Random Picture?

We study the amount of information that is contained in "random pictures“, by which we mean the sample sets of a Boolean model. The talk will explain the concept of a Boolean model, which includes a model for a "completely random distribution of points in the plane". Then we shall study different concepts making the term "amount of information“ mathematically precise.

The presented results are based on a joint work with Mikhail Lifshits (St. Petersburg).