

In this thesis we present the Stone representation theorem, generally known as Stone duality in the point-free context. The proof is choice-free and, since we do not have to be concerned with points, it is by far simpler than the original. For each infinite cardinal κ we show that the counterpart of the κ -complete Boolean algebras is constituted by the κ -basically disconnected Stone frames. We also present a precise characterization of the morphisms which correspond to the κ -complete Boolean homomorphisms. Although Booleanization is not functorial in general, in the part of the duality for extremally disconnected Stone frames it is, and constitutes an equivalence of categories. We finish the thesis by focusing on the De Morgan (or extremally disconnected) frames and present a new characterization of these by their *superdense* sublocales. We also show that in contrast with this phenomenon, a metrizable frame has no non-trivial superdense sublocale; in other words, a non-trivial Čech–Stone compactification of a metrizable frame is never metrizable.