Give fields by joint regional distributions

(to in some sense represent averages)

Consistency Condition: Given a region, its distribution (of intensity) must be the weighted mean of the distributions for any subregions, weighted according to their measure.

Quantum Field is then ensemble of distributions over exhaustive partitions into regions, (one for each partition) satisfying above consistency condition.

(Unfortunately, field equations, i.e. development with time, etc., will depend (to some extent) upon the finer structure. Still, may be able to express laws of gross structure in terms of correlation inequalities — that is,

at least something is known of future development of field from present even when only average values of present known over large regions. → Statistical mechanics of fields.

At any rate, the whole Ensemble determines the future course, since can proceed to limit, extrapolate a little, recover whole works at later time!