Essentially - c_{ij}: connected component of field containing t_j

$$A_{ij} = \{ \lambda(c_{ij}) > u \}$$

$\lambda(c_{ij})$ = volume of cluster

$= 0$ if no cluster.

Then.

$$\sum_{i=1}^{M(B_t)} 1[A_{ij}]$$

$$= \sum 1[A_{i0}] + \sum 1[A_{ij}] - 1[A_{i0}]$$

$= 0$ as t_j for small enough ε as then t_j to lie in the same cluster.

combined using the probability of 1 or more local maxima, since: denominator also goes to zero and labeled above by

Need to show that the density of ∇Y given sup B_Y is continuous