

Re: Scattered sets are G -delta

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Hi, physicist's view:

1) your scattered set S should be countable (because every compact interval $\langle -K; K \rangle$ of \mathbb{R} can contain only finite number of isolated points); you can intersect S with $\langle -K; K \rangle$ and take isolated points until there are some

2) now when S is countable collection of isolated points x_n , for every n there is ϵ_n such that $(x_n - \epsilon_n; x_n + \epsilon_n)$ intersects S only at point x_n ; for every natural m define G_m as union over n of open sets $(x_n - \epsilon_n/m, x_n + \epsilon_n/m)$. For every m you get open set and intersection of all of G_m gives S .

I don't know if it is correct, but I hope it can help you somehow.

Tomas

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