



Signed Set Decomposition Existence

1 Why

Does a signed-set decomposition exist for any signed measure?

2 Result

The answer is yes.

Proposition 1. *Let (X, \mathcal{A}) be a measurable space. Let $\mu : \mathcal{A} \rightarrow [-\infty, \infty]$ be a signed measure. There exists a signed-set decomposition of X under μ .*

Proof. TODO

□

2.1 Uniqueness