

## SIGNED SET DECOMPOSITION EXISTENCE

## Why

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

## Result

The answer is yes.

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

