

Lebesgue Integration and Probabilities

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1 Measures on a product space

1.1 Product of measurable spaces

Def 1.1 (Product of measurable spaces).

$(E_1, \mathcal{E}_1), \dots, (E_n, \mathcal{E}_n)$: *measurable sp.*

*Then the **product measurable space** is a measurable space $(E_1 \times \dots \times E_n, \sigma(\mathcal{E}_1 \times \dots \times \mathcal{E}_n))$.*