Practico 30 de agosto

Friday, August 30, 2019 8:40 PM

Pr1, Ej1 parte b

$M \subset \mathcal{P}(X)$, $R(M)$ anillo gen M

Entonces $R(M) \cap Y = R(M \cap Y)$

$A \in R(M) \cap Y$, $A = A' \cap Y$, $A' \in R(M)$

$A' \in R'$ anillo, $R' \supset M$

$R(M) \supset M$; $\bigcap R$

$R \supset M$

R anillo

$\underbrace{R(M)}_{*} \cap Y$ → por parte a es anillo

→ $R(M) \cap Y \supset M \cap Y$

Luego $R(M) \cap Y$ es un anillo que contiene $M \cap X$

Por lo cual $R(M) \cap Y \supset R(M \cap Y)$

$R(M \cap Y) \supset \underbrace{R(M) \cap Y}$,

$A \in R(M) \cap Y$ si $A = A' \cap Y$

$A' = E \cup F$, $E, F \in R(M)$

$E - F$

Sup. $A \in R(M) \cap Y$

$$\boxed{\begin{array}{c}\text{Sup. } A \in R(M), Y / \\ A \notin R(M \cap Y)\end{array}}$$

$A = \underbrace{A'}\cap Y, \quad A' \subset \bigcup_{n=1}^{m} A_n$

$A_n \in M$

$$A = A' \cap Y \subset \bigcup_{n=1}^{m} A_n \cap Y$$

$A_n \cap Y \in M \cap Y$

$$\#\underbrace{\mathcal{P}([0,1])} = \underbrace{\aleph_2}$$

$$\#\underbrace{R(\text{intervalos})}$$

incluido σ-alg Borel

$$\#B = \#R$$

Entrega 1

$$I^{(n)} = (a_1, b_1] \times \_\_\_\_ \times (a_n, b_n]$$

$$A = \bigcup_{i=1}^{m} I_i^{(n)}, \quad B = \bigcup_{i=1}^{p} I_i^{(n)}$$

Pr 2, Ej 2 prop 56

$E, F \in \overline{S}$, $\quad E = E' \cup M_1, \; M_1 \subset B_1 / \mu(B_1) = 0$ $\quad F = F' \cup M_2, \; M_2 \subset B_2 / \mu(B_2) =$

$\quad \in S \; \in S$

$$E - F = E \cap F^c =$$

$$(E' \cup M_1) \cap (F' \cap M_2)^c =$$

$$E' \cap (F' \cap M_2)^c \cup M_1 \cap (F_1 \cap M$$

$$E' \cap (F'^c \cup M_1^c) =$$

$$E' \cap F'^c \cup \boxed{E' \cap M_1^c}$$

$= 0$

$2)^c$

$C B_1 / \ell\ell(B_1) = 0$

$E' - F'$, $\Sigma\sigma$-anillo

$$\underbrace{\overline{E'} \cap M_1^c}_{} = \underbrace{\overline{E'}}_{} - M$$

$$\underline{M_1 \in \overline{S}}$$
$$\emptyset \cup M_1$$

$$\underline{E' \in \overline{S}}$$
$$\overline{E'} \cup \emptyset$$

$$\overline{E'} = \overline{E}$$

$S \subset \overline{S}$

* si $M_1 \subset B_1 / \mu(B_1)=0$
$M_1 \in \overline{S}$

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