

Lecture Notes on Descriptive Set Theory

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Notation

$U_\varepsilon(x)$	Ball of radius ε about x
\overline{U}	Topological closure of U
$2^{<\mathbb{N}}$	Set of finite binary strings
σ, τ, \dots	Finite binary strings
$2^{\mathbb{N}}$	Cantor space, set of all infinite binary sequences
$\mathbb{N}^{\mathbb{N}}$	Baire space, set of all infinite sequences of natural numbers
$\alpha \upharpoonright_n$	Length n initial segment of sequence α , $\alpha(0) \dots \alpha(n-1)$.
$[\sigma]$	Open cylinder defined by σ

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