Sergei Logunov

On non-normality points, Tychonoff products and Suslin number

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Abstract: Let a space X be Tychonoff product $\prod_{\alpha<\tau} X_\alpha$ of τ-many Tychonoff nonsingle point spaces X_α. Let Suslin number of X be strictly less than the cofinality of τ. Then we show that every point of remainder is a non-normality point of its Čech–Stone compactification βX. In particular, this is true if X is either R^τ or ω^τ and a cardinal τ is infinite and not countably cofinal.

Keywords: non-normality point; Čech–Stone compactification; Tychonoff product; Suslin number

AMS Subject Classification: 54D15, 54D35, 54D40, 54D80, 54E35, 54G20

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