

## Sergei Logunov

### *On hereditary normality of $\omega^*$ , Kunen points and character $\omega_1$*

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**Abstract:** We show that  $\omega^* \setminus \{p\}$  is not normal, if  $p$  is a limit point of some countable subset of  $\omega^*$ , consisting of points of character  $\omega_1$ . Moreover, such a point  $p$  is a Kunen point and a super Kunen point.

**Keywords:** non-normality point; butterfly point; Kunen point; super Kunen point

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

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