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On π−caliber and an application of Prikry's partial order

Abstract: We study the concept of π-caliber as an alternative to the well known concept of caliber. π-caliber and caliber values coincide for regular cardinals greater than or equal to the Souslin number of a space. Unlike caliber, π-caliber may take on values below the Souslin number of a space. Under Martin's axiom, 2^{ω} is a π-caliber of $\mathbb{N}^{*}$. Prikry's poset is used to settle a problem by Fedeli regarding possible values of very weak caliber.

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