# Does twofold mixing imply threefold mixing 

Steve Kalikow
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\begin{aligned}
& \text { Abstract } \\
& \text { It is an open problem whether, for measure preserving } T, \\
& \lim _{n \rightarrow \infty} \mu\left(T^{-n}(A) \cap B\right)=\mu(A) \cdot \mu(B) \\
& \text { implies } \\
& \lim _{n \rightarrow \infty} \mu\left(T^{-2 n}(A) \cap T^{-n}(B) \cap C\right)=\mu(A) \cdot \mu(B) \cdot \mu(C) .
\end{aligned}
$$

This talk discusses an approach to that problem.

