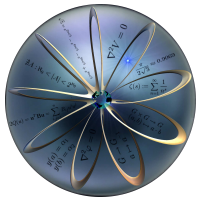

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Baroni's theorem

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Let $(x_n)_{n\geq 0}$ be a sequence of real numbers such that $\lim_{n\to\infty}(x_{n+1}-x_n)=0$. Let $A=\{x_n|n\in\mathbb{N}\}$ and A' the set of limit points of A. Then A' is a (possibly degenerate) interval from $\overline{\mathbb{R}}$, where $\overline{\mathbb{R}}=\mathbb{R}\bigcup\{-\infty,+\infty\}$