Assume that $X$ is a compact metric space and $f : X \to X$ is a continuous map.

**Definition.** A sequence $\{x_i\}_{i=0}^\infty$ of points from $X$ is an asymptotic-average pseudo orbit of $f$ if $\lim_{n \to \infty} 1/n \cdot \sum_{i=0}^{n-1} d(f(x_i), x_{i+1}) = 0$.

**Definition.** A sequence $\{x_i\}_{i=0}^\infty$ of points from $X$ is asymptotically shadowed in average by a point $z \in X$ if $\lim_{n \to \infty} 1/n \cdot \sum_{i=0}^{n-1} d(f^i(z), x_i) = 0$.

**Definition.** The map $f$ has the asymptotic average shadowing property (AASP) if every asymptotic-average pseudo orbit of $f$ is asymptotically shadowed in average by some point $z \in X$.

**Theorem.** If $f$ has AASP then $f^k$ has AASP for every $k > 1$.
If $f^k$ has AASP for some $k > 1$ then $f$ has AASP.

**Theorem.** If $f$ is a surjection with AASP then $f$ is chain-transitive (i.e. for any $\delta > 0$ any two points $a, b \in X$ can be connected by a finite $\delta$-pseudo orbit of $f$ starting at $a$ and terminating at $b$).

**Theorem.** If $f$ is a $L$-hyperbolic homeomorphism with AASP then $f$ is topologically transitive.

(Presented by Marcin Kulczycki)