On some asymptotic properties of metric spaces related with power control functions.

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In this speech some of asymptotic properties of metric spaces are considered. In the first part the asymptotic power dimension is introduced - invariant under the bi-Hölder transformations. This dimension is related with coverings which size is controlled by power functions. The last ones naturally generate the algebra of Higson subpower functions. Relations between the compactification that corresponds to this algebra and already known compactifications are considered in the second part of this speech.