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**APPROXIMATION OF FRACTIONAL
BROWNIAN MOTION WITH ASSOCIATED
HURST INDEX SEPARATED FROM 1 BY
STOCHASTIC INTEGRALS OF LINEAR POWER
FUNCTIONS**

In this article we present the best uniform approximation of the fractional Brownian motion in space $L_\infty([0, T]; L_2(\Omega))$ by martingales of the following type $\int_0^t a(s)dW_s$, where W is a Wiener process, a is a function defined by $a(s) = k_1 + k_2 s^\alpha$, $k_1, k_2 \in \mathbb{R}$, $s \in [0, T]$, $\alpha = H - 1/2$, H is the Hurst index, separated from 1, associated with the fractional Brownian motion.