1108-60-329 **Litan Yan*** (litanyan@hotmail.com), 2999 North Renmin Rd., Songjiang, Shanghai 201620, P.R. China, Shanghai, Peoples Rep of China. *Some functionals for fractional Brownian motion.*

Let B^H be a fractional Brownian motion with Hurst index $H \in (0,1)$. In this talk, we consider the functional

$$\mathcal{K}_t^{H,f}(a) := \int_0^t f(B_s^H - a, s) ds^{2H}$$

with $t \geq 0$ and $a \in \mathbb{R}$, where f is a Borel function. We shall mainly devote to study some analysis questions with respect to the function. In particular, when f is time-independent and non locally integrable we consider some principal value questions.

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