1067-34-20   **Toka Diagana*** (`tokadiag@gmail.com`), Howard University, Department of Mathematics, 2441
6th Street NW, Washington, DC 20059. *Existence of Pseudo Almost Automorphic Solutions to
Some Second-Order Partial Evolution Equations.* Preliminary report.

Let $\mathbb{X}$ be a Banach space. This talk is concerned with the existence of pseudo almost automorphic solutions to the class of second-order partial evolution equations

$$\frac{d}{dt}\Big[Q'(t) + F(t, Q(t))\Big] = A(t)Q(t) + G(t, Q(t)), \quad t \in \mathbb{R}$$

where $A(t)$ for $t \in \mathbb{R}$ is a family of sectorial linear operators on $\mathbb{X}$ and $F, G : \mathbb{R} \times \mathbb{X} \mapsto \mathbb{X}$ are jointly continuous functions satsifying some additional conditions. Under some reasonable sufficient conditions, various existence results will be established. A few examples will also be discussed. (Received May 16, 2010)