PIERRE-OLIVIER PARISÉ, University of Hawaii at Manoa Infinite Matrices of Operators

A summability method can be given as an infinite matrix of the form

$$A = \begin{pmatrix} a_{0,0} & a_{0,1} & a_{0,2} & \cdots \\ a_{1,0} & a_{1,1} & a_{1,2} & \cdots \\ a_{2,0} & a_{2,1} & a_{2,2} & \cdots \\ \vdots & \vdots & \vdots & \ddots \end{pmatrix}, \quad a_{i,j} \in \mathbb{C}.$$

In this talk, based on A. Robinson's article On Functional Transformation and Summability, I will present a generalization of a summability method where each entry $a_{i,j}$ is replaced by a bounded linear operator on a Banach space. I will also show a generalization of the Silverman-Toeplitz Theorem in this new framework. Note: I will present in English, but the slides will be in French.