

### Robinson's Theorem for Non-Archimedean Banach Spaces

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#### ABSTRACT

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Robinson's theorem is one of the most used theorem in non-archimedean Banach spaces. This theorem was first given in D. Somasundaram, On a theorem of Robinson for non-archimedean Banach spaces, Indian J. pure appl. Math., 27(2), 183-192, 1996. Let  $F$  be a field complete with valued non-archimedean field and  $X$  be a non-archimedean Banach spaces.  $A_{np}$  is an infinite matrix such that  $A_{np} \in B(X)$  for all  $n$  and  $p$  where  $B(X)$  denotes the space of bounded lineer operators on  $X$  into itself. Robinson's theorem is about necessary and sufficient conditions for the matrix  $A_{np}$  to be reguler. In this study, the proof of the theorem of Somasundaram is corrected.

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