

**Initial value problems for first order impulsive  
integro-differential equations of Volterra type in  
Banach spaces**

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**Abstract.** In this paper, we use a new method and combining the partial ordering method to study the existence of the solutions for the first order nonlinear impulsive integro-differential equations of Volterra type on finite interval in Banach spaces and for the first order nonlinear impulsive integro-differential equations of Volterra type on infinite interval with infinite number impulsive times in Banach spaces. By introducing an interim space and using progressive estimation method, some restrictive conditions on impulsive terms, used before, such as, prior estimation, noncompactness measure estimations are deleted.

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