

# Inertial algorithms with adaptive stepsizes for split variational inclusion problems and their applications to signal recovery problem

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## Abstract

With the help of the Meir-Keeler contraction method and the Mann-type method, two adaptive inertial iterative schemes are introduced for finding solutions of the split variational inclusion problem in Hilbert spaces. The strong convergence of the suggested algorithms are guaranteed by a new stepsize criterion that does not require calculation of the bounded linear operator norm. Some numerical experiments and applications in signal recovery problems are given to demonstrate the efficiency of the proposed algorithms.

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