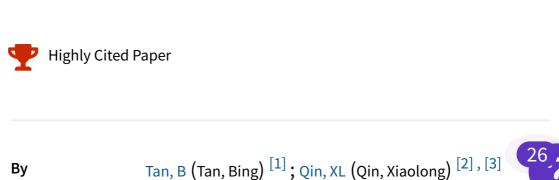


Two relaxed inertial forwardbackward-forward algorithms for solving monotone inclusions and an application to compressed sensing



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Abstract Two novel algorithms, which incorporate inertial terms and

relaxation effects, are introduced to tackle a monotone inclusion problem. The weak and strong convergence of the algorithms are obtained under certain conditions, and the R-linear convergence for the first algorithm is demonstrated if the set-valued operator involved is strongly monotone in real Hilbert spaces. The proposed algorithms are applied to signal recovery problems and demonstrate improved performance compared to existing algorithms in the

literature.

Keywords: Inclusion problems; monotone

operator; signal recovery; forward-backward-forward

method; convergence rate

Keywords Plus: SPLITTING METHOD; CONVERGENCE;

OPERATORS; SUM

Author Corresponding Address Qin, (corresponding

Information : Xiaolong author)

Hangzhou Normal Univ, Dept Math, Hangzhou,

Peoples R China

Corresponding Address Qin, (corresponding

: Xiaolong author)

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Nanjing Ctr Appl Math, Nanjing, Peoples R China

E-mail Addresses:

qxlxajh@163.com

Addresses:

1 Southwest Univ, Sch Math & Stat, Chongqing, Peoples R China

2 Hangzhou Normal Univ, Dept Math, Hangzhou, Peoples R China

3 Nanjing Ctr Appl Math, Nanjing, Peoples R China E-mail Addresses:

bingtan@swu.edu.cn; qxlxajh@163.com

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