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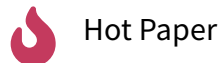
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Abstract We present three novel algorithms based on the forward-backward splitting technique for the solution of monotone inclusion problems in real Hilbert spaces. The proposed algorithms work adaptively in the absence of the Lipschitz constant of the single-valued operator involved thanks to the fact that there is a non-monotonic step size criterion used. The weak and strong convergence and the R-linear convergence of the developed algorithms are investigated under some appropriate assumptions. Finally, our algorithms are put into



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practice to address the restoration problem in the signal and image fields, and they are compared to some pertinent algorithms in the literature.

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Alvarez, F and Attouch, H
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References