Solving Economic Models in Continuous Time using the Pseudo-Transient Method

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$$
\begin{aligned}
0 &= \frac{C}{W} + E[\frac{dW}{W}] - r - \kappa\sigma[\frac{dW}{W}] \\
0 &= \frac{1}{p} + E[\frac{dC}{C}] + E[\frac{dp}{p}] + \sigma[\frac{dp}{p}]\sigma[\frac{dC}{C}] - r - \kappa(\sigma[\frac{dC}{C}] + \sigma[\frac{dp}{p}])
\end{aligned}
$$

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