1023-93-1740     **Cristin Buescu\*** (`cristin@math.missouri.edu`), Department of Mathematics, 202 Mathematics
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University of Missouri-Columbia, Columbia, MO 65211. *An ergodic control problem of a diffusion
with jumps.* Preliminary report.

Controlling jump diffusions in order to maximize a reward functional over the long run can sometimes be reduced to
optimally controlling the diffusion until the first jump and then identifying the optimal jump. This happens when the
cycles between jumps are i.i.d., and the optimal control is repeated in each subsequent cycles. We present an example
from portfolio investment, show the existence of viscosity solution and obtain numerical results. (Received September 26,
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