

Item: 3 of 5 | [Return to headlines](#) | [First](#) | [Previous](#) | [Next](#) | [Last](#)[MSN-Support](#) | [Help Index](#)Select alternative format: [BibTeX](#) | [ASCII](#)**MR1934071** (2003f:70033)**Kirillov, O. N.; Seiranyan, A. P.****On a nonsmooth optimization problem. (Russian. Russian summary)***Vestnik Moskov. Univ. Ser. I Mat. Mekh.* **2002, no. 3**, 29–34, 70.[70J99 \(49J52 74P10\)](#)[Journal](#)[Article](#)[Doc Delivery](#)**References: 0****Reference Citations: 0****Review Citations: 0**

Summary (translated from the Russian): “We consider a linear autonomous nonconservative mechanical system that depends smoothly on the parameter of the nonconservative load and the vector of structural parameters. The performance functional is defined as the minimal value of the parameter of the nonconservative load for which static or dynamic loss of stability occurs. We pose the problem of determining the structural parameters that maximize the performance functional. We show that such an optimization problem is nonsmooth. We establish the values of the vector of structural parameters for which the performance functional has a discontinuity, and we derive necessary local extremum conditions for such vectors.”

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