

## عنوان مقاله:

Asymptotic method for solution of oscillatory fractional derivative

## محل انتشار:

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## خلاصه مقاله:

In the paper, an oscillatory system with liquid dampers is considered, when the mass of the head is large enough. By means of expedient transformations, the equation of motion with fractional derivatives is reduced to an equation of fractional order containing a small parameter. The corresponding nonlocal boundary value problem is solved and the zero and first approximations of solutions of the relative small parameter are constructed. The results are illustrated on the concrete example, where the solution differs from the analytical solution by  $10^{-2}$  order.

## کلمات کلیدی:

Oscillatory systems of fractional derivative, small parameter, asymptotic method, zero and first approximations

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1595587>

