عنوان مقاله:

A collocation method for solving Fredholm integral equation of the first kind with hard singularity

محل انتشار:

دومین کنفرانس ملی ریاضی:مهندسی پیشرفته با تکنیک های ریاضی (سال: 1396)

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خلاصه مقاله:

In this paper, we introduce the concept of Cauchy principal value and Hadamard finite-part in singular integrals. We derive a new expression for integral part and then construct some collocation method for solving integral equations involving Cauchy principal value and Hadamard finite-part singularities. A numerical example performed to illustrate the theoretical results.

کلمات کلیدی:

Collocation method, Cauchy principal value, Hadamard finite-part, Hypersingular integral equation

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