

On the numerical solution of integro-differential equations of Prandtl's type

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This series of lectures starts with a short introduction on the integro-differential equations of Prandtl's type and the mapping properties of the related hypersingular integral operators.

The second step is to introduce collocation and quadrature methods for linear integro-differential equations of Prandtl's type and different iterative schemes based on collocation methods to solve nonlinear hypersingular integral equations.

At the end of the course we will present also fast algorithms for the considered methods.

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