ON ANTI-GAUSSIAN SCHEMES APPLIED TO INTEGRAL EQUATIONS

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This talk deals with the application of anti-Gaussian schemes to second-kind Fredholm integral equations of the type

$$f(y) + \int_{\mathcal{D}} k(x,y)f(x)d\mu(x) = g(y), \quad y \in \mathcal{D}.$$

Here, the kernel k and right-hand side g are given, the function f is to be determined, and $d\mu(x)$ is a nonnegative measure supported on a bounded or unbounded domain $\mathcal{D} \subset \mathbb{R}$.

Old and new results will be presented, including extensions to the bivariate case.

This work has been developed with Giuseppe Rodriguez and other collaborators of the Cagliari Numerical Analysis Group.

References

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