Analysis Seminar

Stability of Lebesgue constants

By

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Abstract: It is known that Lebesgue constants $\Lambda(X)$ in polynomial interpolation are rather sensitive to perturbations of interpolating nodes X. On the other hand, $\Lambda(X)$ is a continuous function of the nodes, thus appears the natural question about the size of node perturbation that preserves the order of Lebesgue constants. We discuss recent results by M. Vianello and F. Piazzon about the value of perturbations of nodes in the Euclidean distance and in the *Dubiner distance* for which the Lebesgue constants will not change essentially. The talk is available for students. The research is funded under TUBITAK's 1001 Grant 119F023.

Date: Tuesday, March 10, 2020

Time: 16:00-17:00

Place: Mathematics Seminar Room, SA – 141

Tea and cookies will be served before the seminar.