

Vladikavkaz Scientific Center of the



Russian Academy of Sciences



North Caucasus Center for Mathematical Research
of the Vladikavkaz Scientific Center of the RAS
Southern Mathematical Institute
of the Vladikavkaz Scientific Center of the RAS



International Seminar

"Operator Theory, Differential Equations and their Applications"

Seminar Chairmen: Prof. Anatoly G. Kusraev, Prof. Marat A. Pliev
Seminar Secretary: PhD Batradz B. Tasoev

February 22, 4 PM (UTC+3)

Special series in Meixner polynomials and Sobolev
orthonormal functions generated by Laguerre functions

R.M. Gadzhimirzaev

Dagestan Federal Research Center of the RAS

The problem of approximation of discrete functions by partial sums of the Fourier series and a special series in modified Meixner polynomials is considered. Estimates are obtained for the corresponding Lebesgue functions. Moreover, a system of functions orthonormal in the sense of Sobolev and generated by a system of Laguerre functions is considered. For this system recurrent relations are obtained and asymptotic properties are investigated. The problem of the convergence of the Fourier series by this system to functions from the Sobolev space is also considered.

[JOIN THE SEMINAR](#)

The seminar uses **Webinar** platform.

The seminar is organized by North Caucasus Center for Mathematical Research of the Vladikavkaz Scientific Center of the RAS jointly with Southern Mathematical Institute of the Vladikavkaz Scientific Center of the RAS.

If you have any questions please don't hesitate to contact the secretary of the seminar Batradz Tasoev at seminar_otde@mail.ru