Natália Bebiano
This talk is based in a joint work with:
Wei-Ru Xu; Yi Gong and Guo -Liang Chen

Abstract

The problem of reconstructing a *pseudo-Jacobi matrix*, arising from the discretization and truncation of the Schrödinger equation, is of interest in non-Hermitian quantum mechanics. In the same context, the reconstruction of the Hamiltonian system of an indefinite *Toda lattice* and the symmetry reduction of the *Wess-Zumino-Novikov-Witten* model in quantum field theory, deserve the attention of physicists and mathematicians. In this talk, the *pseudo-Jacobi inverse eigenvalue problem* (hereafter **PJIEP**), which concerns the reconstruction from assigned spectral data of a specified pseudo-Jacobi matrix , is investigated.

Keywords: Inverse eigenvalue problem; pseudo-Jacobi matrix

AMS Classification: 65F18; 15A51; 15A18; 15A12