

GEBZE TECHNICAL UNIVERSITY

General Seminars in Mathematics

Neumann Problems in Polydomains

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Abstract

In this presentation, we will discuss the Neumann problem for higher-order model equations in the unit polydisc of \mathbb{C}^2 . We employ a unified technique given previously (in [1] and then improved in [2]) for the derivation of the integral representations of the functions defined in the unit polydisc of \mathbb{C}^2 . This approach will also be extended to \mathbb{C}^n to provide explicit representations for the solutions of Neumann problems in higher dimensions.

References:

- 1) A. Okay Celebi; Dirichlet problems in polydomains, (Editors: P. Drygas, S. Rogosin) Modern Problems in Applied Analysis, Birkhäuser, pp 65-76, 2017,
- 2) A. Okay Celebi; Boundary Value Problems in Polydomains, (Editors: A. O. Celebi, S. Rogosin) Trends in Mathematics, Birkhäuser, pp 69-92, 2019.



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