

Functional Analysis, Mathematical Physics, and Dynamical Systems

(FAMPDS)

Joint American-Ukrainian Virtual Colloquium Series

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Talk 3: Setting of the Conflict Problem in the Framework of Functional Analysis

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Abstract

We give an introduction to the mathematical setting of the conflict problem in terms of constructions in a Hilbert space. The opponents, as the main objects of conflict phenomena, will be presented by operators and vectors in a Hilbert space or by probability distributions on a joint resource space for opponents. The conflict phenomenon is mathematically reflected as the intersection or overlap of operator domains and spectral measure supports. The confrontation between opponents is described by the conflict composition (a transformation in terms of spectral measures). It generates the conflict dynamical system. Thus, there emerges the fundamental question of how to redistribute the starting intersections and overlaps. The resolution of a conflict problem means arriving at equilibrium states (fixed points) for the conflict dynamical system.

Friday, March 19, 10:00-11:00 AM (PDT), 19:00-20:00 (EET)

Online via Zoom at

<https://fresnostate.zoom.us/j/5233106532>