

**”The Trans-Carpathian Seminar on Geometry & Physics”**

(See also the [Geometry & Physics @ DFT](#) seminar homepage)

*Date:* Wednesday, April 24, 2024, 15:15 Bucharest time

*Location:* online via Zoom

*Speaker:* **Prof. Daniel Beltita** (IMAR, Bucharest)

*Title:* **Lie group representations and standard subspaces of Hilbert spaces**

*Abstract:* We will discuss one-parameter operator groups, specifically holomorphic extensions with respect to the parameter, from the real line to suitable horizontal strips in the complex plane, as well as Kubo-Martin-Schwinger (KMS) boundary conditions. We will also present applications to certain constructions of nets of standard subspaces in the framework of Lie group representations, as they appear in Algebraic Quantum Field Theory. They require one-parameter operator groups on spaces of distribution vectors of unitary representations of Lie groups and will be briefly discussed as well. This is joint work with Karl-Hermann Neeb (Friedrich-Alexander-Universität Erlangen-Nürnberg).