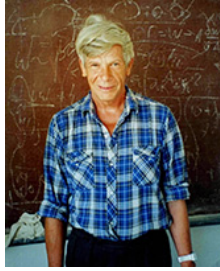


VII International Conference “Models in Quantum Field Theory”
(MQFT-2022)



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Field-theoretic models of turbulence: From Kolmogorov power laws to intermittency

Monday, 10 October 2022 10:00 (45 minutes)

A review of the achievements in the theoretical study of (magneto)hydrodynamic turbulence by the methods of quantum field theory is presented. The main focus is given to the problem of justification of the Kolmogorov scaling and its violation, the calculation of critical exponents determining the scaling behavior of the statistical correlations of the studied random fields (velocity, magnetic field, concentration) in the inertial interval of space scales, the calculation of representative parameters such as the Kolmogorov constant, skewness factor, Prandtl number, etc.

Presenter: MICHAL, Hnatic (Bogoliubov Laboratory of Theoretical Physics, JINR)

Session Classification: Plenary Session