

**Современная математическая физика**

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состоится в четверг 21 мая в 14:30 в аудитории им. Д.И. Блохинцева

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**Wigner- type continuous spin equations in AdS<sub>D</sub>**

In this talk, we present a formulation of Wigner-type equations of motion describing continuous spin field dynamics in Anti-de Sitter (AdS) spacetime of arbitrary dimension  $D$ . To this end, we employ a system of constraints that uniquely fix the Casimir operators of the  $so(2, D-1)$  algebra. We begin by revisiting the symmetric subclass of continuous spin representations within the flat-space Wigner construction. Next, we extend these equations to the AdS background by consistently deforming the covariantized constraints. We explicitly realize these constraints in terms of covariant derivatives and internal spin-space variables for both bosonic and fermionic fields. For the fermionic case, the constraints are formulated within the  $osp(1|2)$  superalgebra framework. The resulting representations are matched with the Metsaev classifications, identifying the precise ranges of the continuous spin parameter  $\mu$  that correspond to unitary irreducible representations in AdS.