# SEMINAR

## Assoc.Prof. Aybike Özer
## Istanbul Technical University

**Title:** Classical Yang-Baxter Equation Emerging From Theories of Gravity

**Abstract:** Given a Lie algebra with an endomorphism that satisfies the Classical Yang-Baxter equation, one can construct a Lie bialgebra and its Drinfeld double. On a group manifold with an ad-invariant metric, such an endomorphism leads naturally to a Poisson structure. We will describe how this Poisson structure can be utilized to construct O(d,d) and Spin(d,d) transformations, that act on certain geometric theories of gravity as solution generating transformations. If time allows, we will also talk about the analogous story for Lie algebroids and Courant algebroids which, in a certain sense, are Drinfeld doubles for Lie bialgebroids.

***Date*: 2 June 2021 Wednesday**

***Seminar*: 14:30-15:30**

***Place*: Zoom**

***(Please send an email for the Zoom link)***

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