

SIMION STOILow INSTITUTE OF MATHEMATICS OF THE ROMANIAN ACADEMY  
with support from PNRR project CF159

## IMAR Invited Talk

# On generalized Hitchin fibrations

**Ngô Bảo Châu**

University of Chicago, USA

**Tuesday, May 14, 2024, 12:00**

IMAR, *Miron Nicolescu* amphitheater

**Abstract:** The moduli space of Higgs bundle appears first in non-Abelian Hodge theory as the Dolbeault side of the moduli space of local system. It is equipped with a structure of completely integrable system known as the Hitchin fibration. The geometry of the Hitchin fibration is rich and enlightens some important problems in local harmonic analysis. I will recall the geometry of the Hitchin fibration and its generalizations.