

# INVITATION TO THE DOCTORAL SEMINAR

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**Prof. Dr. Phuoc-Tai Nguyen**

Masaryk University Brno

**“FOCUSING NONLINEAR SCHRÖDINGER EQUATION WITH  
AN INVERSE-SQUARE POTENTIAL”**

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📅 Wednesday, 3 November 2021

🕒 10:00 a.m.

## **Abstract**

In this talk, I will consider the focusing nonlinear Schrödinger equation with an inverse-square potential. The uniqueness of the ground state solution and a sharp Hardy-Gagliardo-Nirenberg interpolation inequality will be discussed. Moreover, a complete characterization for the minimal mass blow-up solutions to the associated Cauchy problem will be provided.

Barbara Kaltenbacher and the Department of Mathematics look forward to seeing you at the talk!