

## Invitation

to the seminar of Division of Elementary Particle Physics of  
the Institute of Physics of the Czech Academy of Sciences



### Dr. Renann Lipinski Jusinkas

Institute of Physics  
of the Czech Academy of Sciences

## Classical equations of motion and scattering amplitudes

**Abstract:** In this introductory seminar I will present a simple recursive method for computing tree level scattering amplitudes in field theory. The method is solely based on classical equations of motion, without any input from Feynman diagrams. I will present a series of examples involving the scattering of scalars, gluons, and gravitons. Finally, I will discuss some work in progress on how this construction generalizes in two ways. The first concerns curved backgrounds, in particular (Anti) de Sitter spaces. The second generalization is about a recursive recipe for computing loop amplitudes.

Seminar will take place on **Thursday, May 12, 2022 at 2PM** in the conference hall in the building of the Institute of Physics, Na Slovance 2, Prague 8 on the ground floor. For more info, please see <https://indico.fzu.cz/event/111/>