

---

**Dr. Nikolai Kivel**

---

*Large relativistic corrections to exclusive hadronic decays of  $\chi_{c0}$ -wave charmonium*

July 10, 2023

2:00 pm

HIM building, Conference room 03-143 (3<sup>rd</sup> floor)

---

---

**Abstract**

---

We discuss the effect of relativistic corrections to different exclusive  $J/\psi$  decays into mesons and baryons. In some cases, these corrections are large and strongly affect the results of the LO approximation. The special case is the correction of relative order  $v^2$  due to the structure of the collinear and relativistic expansions, which are used to systematically describe the decay amplitudes. The decays  $J/\psi \rightarrow p\bar{p}$ ,  $J/\psi \rightarrow \rho\pi$  and  $J/\psi \rightarrow \gamma\pi$  will be considered as examples.

---