

Topic	Cosmology, cosmological inflation and gravitational waves
Topic is suitable for	<ul style="list-style-type: none"> • graduation thesis of bachelor students • practical works of master students • graduation thesis of master students
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Annotation	The early Universe is a sensitive laboratory of particle physics. The footprints of the cosmic inflation remain in the initial perturbations of matter and gravitational waves. Cosmic phase transformations can leave signs in gravitational waves as well and explain the abundance of ordinary matter. As the experimental research of gravitation field just started, it is a very exciting and fast growing field of research. Our research group is highly international and has collaborators all over the world, https://hep.kbfi.ee/ .
Expectation for candidate	Interest in particle physics and cosmology, some skills in mathematics (differential equations) and data analysis (Python, Wolfram Mathematica), strong self-learning and collaborative working abilities.

