Research domain **8.** **Experimental particle physics in ALICE**

Number of employees **1**

# Job description We offer a summer trainee position within the ALICE experiment where the main goal is to study the deconfined QCD matter produced in lead-lead collisions in the ultra relativistic center of mass energy regime at the LHC.

The selected candidate will participate in the data analysis in our group. We study the transport properties of the quark-gluon plasma (QGP), created in these collisions, trough flow fluctuation analysis. This analysis resembles harmonic analysis of cosmic microwave background, the early universe sound harmonics. Second main branch of the analysis is to study jet quenching in the expanding QGP to better understand how the jet looses energy during the dynamical evolution of the plasma.

# Preferred student profile Physics student who has studied basic particle physics and is interested in data-analysis. For more information see <https://trac.cc.jyu.fi/projects/alice/wiki/Jan> and the “Ultra-relativistic Heavy Ion Physics” course.

# Special skills required: Programming skills (C/C++) and basic knowledge of Unix-like OS help significantly in getting into work.

# Training period 1.6. - 31.8. 2018

# Contact person

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