RUPRECHT-KARLS-
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HEIDELBERG

The Physics Institute of the Faculty of Physics and Astronomy at Heidelberg University is involved in several particle physics experiments at the LHC and other smaller scale experiments like the Mu3e experiment at the Paul Scherrer Institute (PSI) in Switzerland. The "High Energy Physics" working group invites applications for a

Doctoral Student
for the
ATLAS Event Filter Tracking (EF-Tracking)

In the context of the high luminosity upgrade of the LHC, the Event Filter of the ATLAS experiment will be upgraded to include real-time tracking. Hardware acceleration using commodity hardware, e.g. Graphics Processing Units (GPUs) is considered to significantly improve the performance. The candidate is expected to implement a new and highly parallelisable track reconstruction algorithms on GPUs.

Candidates profile: We are looking for a highly motivated and talented physicist (master degree or 4-years bachelor) with a focus on detector instrumentation in the area of particle tracking and/or hardware accelerated computing (GPUs).

What we offer: several PhD training measures organised by the Heidelberg Graduate School for Physics (HGSFP). We encourage students to also apply to the graduate research training unit "HighRR", which is dedicated to detector instrumentation. For more information see https://www.physik.uni-heidelberg.de/highrr/

Salary and contract duration: The salary group is E13 TV-L 65%-75%, according to the tariff of the state of Baden Württemberg, and depends on personal qualification. Contract duration for PhD students is usually 2+1 years.

Applications including a CV, list of publications, copies of university certificates, transcripts, research statement and two reference letters should be uploaded to the web interface of the Heidelberg Graduate School of Physics: https://hgsfp.uni-heidelberg.de/?SUB=HTA
The deadline for applications is May 22, 2023. Applicants should add "ATLAS EF-Tracking" for reference.

Heidelberg University stands for equal opportunities and diversity. Qualified female candidates are especially invited to apply. Disabled persons will be given preference if they are equally qualified.

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