



# PhD positions: ATLAS Trigger-Level Analysis

The ATLAS group at the Kirchhoff Institute for Physics at Heidelberg University is active in many searches for dark matter including a search with di-jet events, using jets reconstructed from the high level trigger system (trigger-level analysis). By only using jet information from the trigger system, this analysis is able to profit from high trigger event rates and is thereby sensitive to lower dark matter mediator masses compared to the traditional di-jet search. However, trigger jets do not currently use information from the tracking system and therefore are subject to larger experimental uncertainties. We are seeking applications from potential PhD students who are interested in working on future trigger-level searches. This work would include integration of tracking information from a hardware fast-tracking system (FTK) into the high-level trigger as well as development of new trigger level analyses.

The ATLAS group at Heidelberg University is a diverse group with strong participation in both searches for new physics, such as dark matter searches as well as precision Standard Model measurements such as di-jet, W+jets and triboson cross section measurements.

We have openings for two students. The first round of applications is due November 30th, although later applications can be considered. Please send a CV and a statement of research interest, and have sent two letters of recommendation to the email address below. A master's degree or equivalent in physics is required. Kindly pass this on to any interested students.

Best regards,

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