



Dear HPS Collaboration Spokespeople,

The Stanford University group of Assistant Professor Lauren Tompkins requests to join the HPS experiment. We have worked primarily on the ATLAS experiment at the LHC in the past, with contributions in charged particle tracking, novel b-tagging algorithms, trigger and data acquisition hardware development, and data analysis. Recently we have been studying dark sector models, completing the first LHC measurement of Dark Higgs decays to W bosons, and have started a dark photon analysis. We have recently joined the LDMX experiment and are working on the trigger and data acquisition system design and studies of LDMX sensitivity to multi-electron events.

Stanford University intends to work on debugging the tracker front end boards, and participate in the design, testing and operation of refurbished FEBs. Postdoctoral scholar Stanislava Sevova has started the SIMP analysis of the 2016 data with undergraduate Jessica Fry, and we plan to additionally work on the 2019 data. We intend to participate in the future runs, through engineering support as well as postdoc and student support as availability allows.

Thank you for your consideration and please let me know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Lauren Tompkins".

Lauren Tompkins

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