Dear Selection Committee,

I am writing in enthusiastic support of Ashish Sehrawat's application for the postdoctoral position at the CMS experiment as advertised at the link https://inspirehep.net/jobs/2677880. As a professor in the field of material sciences, I have had the privilege to observe Ashish's progression from a promising student to an accomplished researcher. I have personally mentored him as his teacher of Classical Mechanics, which has given me a close view of his analytical abilities, determination, and dedication to the field of physics.

During his PhD at Universidad de Sonora, under the collaboration with CMS CERN and the supervision of Dr. Jose Feliciano Benitez. Ashish made significant contributions to the luminosity measurement using the Phase I upgraded pixel detector. His work on this project demonstrated not only his ability to handle complex experimental datasets but also his determination to improve systematic uncertainty in this high stakes field of research. He showed impressive problem-solving skills by successfully improving the afterglow model and obtaining the type 2 afterglow parameters. By formulating a new module veto list for the pixel detector, Ashish is able to improve systematic uncertainty in the PCC luminosity measurement.

Furthermore, Ashish showed commendable versatility by working on the simulation of the Phase-2 upgrade of the CMS tracker. His work on this aspect was notable for its focus on intricate aspects such as the linearity of clusters and distinguishing real coincidences from fake ones. His simulation skills and analytical abilities were instrumental in predicting the performance of the Phase II pixel detector, thereby making a significant contribution to the BRIL project of the CMS experiment.

Finally, his work on the Higgs boson production with a single top quark showed his ability to apply his deep understanding of physics concepts to real-world problems. His proficiency in data analysis was evident in his work on kinematic variables distribution, BDT distribution, and ROC curves in higgs boson tH production mode.

His flexibility and eagerness to work on a range of topics related to luminosity measurement and the search for new physics at the CMS experiment further demonstrate his potential as a postdoctoral researcher. In conclusion, Ashish's combination of technical expertise, creativity, and dedication to his field make him an exceptional candidate for the postdoctoral position at CMS experiment. I am confident that he will make a significant contribution to your team and I strongly recommend him without reservation. Please do not hesitate to contact me if you require further information.

Yours Sincerely,
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