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To whom it may concern

Re: Recommendation for Stefan Schacht

Dear Colleague,

I'm writing to strongly recommend Stefan Schacht for a postdoc position in your group. Mr. Schacht is a thoughtful and committed researcher, with very strong analytic skills and a very friendly personality.

I know Mr. Schacht since he started his diploma thesis under the supervision of Gudrun Hiller in the Dortmund High Energy Theory group. I served as a co-referee for his excellent diploma thesis, and he is a very visible participant in our research seminars.

In his diploma thesis, which I graded with "very good" (1.0), he discussed the transverse polarization of heavy quarks in unpolarized proton collisions using a perturbative ansatz. The work delivered interesting predictions for future measurements at the LHC and may contribute to clarify the questions whether perturbative QCD yields a correct description of hadrons with b-quarks. His thesis thus addressed an important problem, and he demonstrated convincingly that he was able to write clearly and up to the point.

In his PhD work, again supervised by Gudrun Hiller, Stefan Schacht is working on the flavor problems in theories beyond the Standard Model. In particular he has worked on bounds on SUSY models obtained from rare B-decays which have consequences for model building as in SUSY naturally larger FCNCs should arise. Another interesting work deals with the enhanced direct CP violation observed recently in charm decays, where the Standard Model expectation is much smaller than the experimental result. An analysis in terms of SU(3) breaking has strengthened the case for new physics.

Apart from his research Mr. Schacht taught exercise classes for two of my lectures, Advanced Quantum Mechanics and Elementary Particle Theory, and he was a qualified

and engaged teacher. Finally, from the fact that he graduated from high school impressively with the best possible mark, he proved that his skills are multi-dimensional.

In summary Stefan Schacht is a thoughtful, careful theorist with knowledge on collider physics, B-physics and model building. I'm convinced your group will benefit greatly from hiring him.

Sincerely,

A handwritten signature in dark ink, appearing to read 'H. Päs', is centered on the page.

Prof. Dr. Heinrich Päs