

Recommendation for Lucia Hošeková

I enthusiastically recommend Lucia Hošeková for a post-doc position in theoretical high-energy physics. I know Lucia from her undergraduate studies at the Comenius University in Bratislava, Slovakia. She attended several of my exercise classes and then chose to do her Master's thesis under my supervision. I know Lucia as a hardworking student with excellent intuition regarding physics.

By choosing the calculation of the Higgs boson decay to photons in the Minimal Supersymmetric Standard Model as the goal of the Master's thesis, she took up one of the most challenging topics which was offered by the department. This is especially true considering that at the Comenius University the work for the Master's thesis has to be done in parallel to almost a full load of courses. Lucia tackled the challenge outstandingly and was awarded for her relentless hard work the Dean's Distinguished Master's Thesis Award. It was a well deserved award as in one year Lucia had to master the calculations in the Standard Model, derive the lagrangian of the MSSM, learn how to compute loop diagrams and last but not least put all that into a computer code to produce numerical results.

I very much enjoyed having Lucia as a diploma student as she was very independent and motivated in her work. In order to arrive at the final goal, she had to learn several difficult techniques beyond the usual level of an undergraduate student, such as manipulations with Weyl spinors to derive the whole MSSM lagrangian from first principles or calculating the one-loop diagrams as the Higgs decay to photons does not have a tree-level contribution. It wouldn't have been possible to accomplish so much with her diploma thesis, were it not for her pro-active attitude she displayed during the year.

Outside of work, Lucia is an easy-going, communicative person that works extremely well in a team of people.

In conclusion, knowing Lucia both in and out of work, I am pleased to recommend her for any post-doctoral position she may apply to.

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