The Institute of High Energy Physics (HEPHY) of the Austrian Academy of Sciences (OeAW) has a long tradition of participation in both the Belle and the Belle II experiments and plays a leading role in the operation of the Belle II Vertex Detector as well as in physics studies including semileptonic B decays, and dark sector physics and the newly emerged sub-field flavour anomalies. HEPHY is looking for a

**PhD STUDENT POSITION (f*M)**

(part-time, 30h per week)

to join the Belle II group research activities.

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Your tasks:
The candidate will work in the context of flavour physics with data collected at the Belle II experiment and specifically will take a leading role in the search for lepton flavour universality violation in b-quark transitions via precision measurements. The candidate will lead all the main aspects of the measurement with particular attention to properly suppress backgrounds and identify the signal, via the implementation of ad hoc machine and deep learning algorithms such as deep neural networks. In addition the student will contribute to the performance study of the Belle II lepton identification algorithms.

Your profile:
The ideal candidate should hold a Master’s degree in physic or a related field. The applicant will have documented knowledge of particle physics and experience in the analysis of data of high energy physics experiments, documented knowledge of machine learning, and the willingness to contribute to the operation of the Belle II experiment (remotely or in person when applicable). Any of the following point will be considered as an asset:

- Experience at the Belle or Belle II experiment,
- Experience in studies of triggers,
- Experience in flavour anomalies.

For this position we offer a monthly gross salary of € 2.237,60 (paid 14 times), according to the salary scheme of the Austrian Science Fund (FWF).

We offer a dynamic and young research environment in one of the the world’s most livable city (https://en.wikipedia.org/wiki/Global_Liveability_Ranking), the possibility of scientific and personal growth via dedicated support and training. The position will be funded as part of the newly established ERC StG group InterLeptons under the grant agreement 947006 with European Research Council of the EU commission.

Please send your applications including, a recent CV, 1 page motivation letter and 2 letters of recommendation should be send via email to gianluca.inguglia@oeaw.ac.at, mentioning Job ID: HEPHY002DOC222, no later than February 20, 2022.

The Austrian Academy of Sciences (OeAW) pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity. Individuals from underrepresented groups are particularly encouraged to apply.