

DOCC is an interdisciplinary Marie Skłodowska-Curie COFUND doctoral programme at the **University of Innsbruck** that will train 15 PhD students for 3 years on modelling and simulation of complex dynamical continuum systems. DOCC prepares Europe's next top modellers to link simulations and the real world within a multi-disciplinary environment, by providing beyond essential technical expertise also the training in key abilities to communicate and transfer methods and results.

The **Unit of Applied Mechanics** ([www.uibk.ac.at/amech/index.html.en](http://www.uibk.ac.at/amech/index.html.en)) offers for a period of three years a PhD fellowship in the frame of DP DOCC in the research area of

## Structural Dynamics

**Description:** The objective is to assess the reliability of railway bridges subjected to high-speed trains by application of nonstandard stochastic methods such as subset simulation or line-sampling with small estimator variances. Models of dynamic vehicle-bridge-track-subsoil interaction at different scales will be developed. Analyses require the application of high-performance computing.

**Requirements:** Master degree (or equivalent) in civil engineering, and a solid background in computational mechanics and structural dynamics. Excellent computing skills are beneficial.

The successful candidate will be part of the highly active Unit of Applied Mechanics, which is internationally well integrated in the scientific communities of Applied Mechanics and Structural Dynamics.

The PhD research work should preferably start in the period between 06/2020 and 08/2020. We offer an employment contract for 3 years, with an annual gross salary of 40'103 EUR (susceptible to taxes) for 40 hour/week employment. All PhD fellows will be liable to full medical and social contributions according to the Austrian federal legislation, implying a retirement scheme and (partly paid) parental leave.

More information on DP DOCC, requirements and eligibility criteria, and the application and recruiting process are available on the following website: <https://docc.eu>

Specific questions regarding the PhD topic should be directed to Prof. Christoph Adam, e-mail: [christoph.adam@uibk.ac.at](mailto:christoph.adam@uibk.ac.at).

**Application deadline:** April 3, 2020

Innsbruck is a university city situated in Austria, Europe. It offers a wide variety of cultural activities and is ideally situated for winter sports and hiking. English is widely spoken.

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