PRESS RELEASE

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"Nowhere else in Europe, I can study this"

Maria Dolores Perles Garcia is one of this year's graduates in the master programme Forest Information Technology (FIT) at Eberswalde University for Sustainable Development (HNEE), Germany. With her acquired qualities, she was chosen for a worldwide unique forest project in China as a PhD.

How forests are functioning is Maria Dolores Perles Garcia interest. In the last four semesters of her studies, she learnt many different technologies, which allowed a different perspective on forests by using remote sensing. Foresty 4.0. is the key word, which drew a continuous line through her studies in Eberswalde. "During my Bachelor degree in environmental science I was missing an informative part and for that, I searched for it in my Master studies", says Maria Dolores Perles Garcia, who learnt at HNEE how to work with LiDAR*, which allows creating a 3D-model of areas in forestry. With the help of the models, it is possible to deduce on the vitality of trees and their treetops. Additionally during her master thesis, she worked with satellite images, another remote sensing technology. In Kirghizia, she was studying if the location of the tree-shelterbelts affect the crop yield, as well as create a model to predict the biomass volume of the tree-shelterbelts. "My studies in Eberswalde had been the perfect match for me. I was looking for something where I can specialise in the IT field without losing my focus on environmental issues. Nowhere else in Europe, I can study this", says the HNEE student.

Because of her knowledge and qualities using LiDAR, Maria was chosen to become part of the international worldwide unique project called „TreeDì (engl: Tree Diversity Interactions)[1]", which is coordinated by the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig. "I will research a forest about 400 km west of Shanghai together with 18 other international PhD students from various scientific backgrounds. The aim is to examine tree-to-tree-interaction and its impact on the ecosystem forest. This is very exciting, because it is a new approach and a project like that has not exist before", adds Maria Dolores Perles Garcia, who will be working in TreeDì for the next three years starting this month. Each of the PhD thesis will research on one part of the ecosystem such as analysing the roots as well as flora and fauna. Maria Dolores Perles Garcia's task will be the analysis of effects of local neighbours on complementarity in crown architecture of the tree species pairs by quantifying the spatio-temporal dynamics of aboveground growth patterns using Terrestrial laser scanning. "It is considered that aboveground complementarity of resource use has an important mechanism for increased biomass production in diverse tree communities. I need to find out what complementary space occupation and spatial niche differentiation in tree crowns have to do with that", describes Maria.

Further information about the master degree „Forest Information Technology (FIT)" you can find on the university's website: www.hnee.de/E1833

For further questions, please contact:

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* LiDAR (Light Detection and Ranging) is a surveying method that measures distance to a target by illuminating the target with pulsed laser light and measuring the reflected pulses with a sensor. Differences in laser return times and wavelengths can then be used to make digital 3-D representations of the target.

[1] TreeDì - Tree Diversity Interactions: The role of tree-tree interactions in local neighbourhoods in Chinese subtropical forests. The aim is to understand how tree-tree interactions in local neighbourhoods of varying diversity translate into the observed positive tree species richness effects on key ecosystem functions at the community scale. It is an International Research Training Group funded by the German Research Foundation (DFG) and the University of Chinese Academy of Sciences (UCAS). All research projects are carried out on the BEF-China platform in subtropical China - the largest forest BEF experiment worldwide. More https://www.idiv.de/de/treedi.html

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Eberswalde University for Sustainable Development (HNEE) is the smallest university in Brandenburg with about 2,100 students and 58 professors. With its 19 innovative and partly unique degree programmes in four faculties – Forest and Environment, Landscape Management and Nature Conservation, Wood Engineering and Sustainable Business, the HNEE is one of the best-performing universities of applied sciences in Germany. As a trailblazer and pioneer of sustainable development, the HNEE was the first German university to be EMAS-certified in 2010. It is also the first educational institution to adopt innovative climate protection management. www.hnee.de

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