

ÖAW

AUSTRIAN
ACADEMY OF
SCIENCES175
WIR ENTDECKEN
ZUKUNFT.
SEIT 175 JAHREN.

Photos: ChristianSteinness; Lucy Pao



LECTURE

EFFICIENT WIND ENERGY SYSTEMS

CHALLENGES AND OPPORTUNITIES TO ENABLE A CLEAN ENERGY FUTURE

LUCY PAO

University of Colorado Boulder

WELCOME

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INTRODUCTION AND MODERATION

VERENA WINIWARTER

Austrian Academy of Sciences and University of Natural Resources and Life Sciences

MARCH 8, 2022

5:30 PM CET

AUSTRIAN ACADEMY OF SCIENCES
THEATERSAAL
SONNENFELSGASSE 19, 1010 VIENNA
AND ONLINE

Powerful and fleeting: As powerful storms and wind are experienced, it is just as difficult to optimize the use of these dynamic forces to generate energy. But wind turbines in particular can make a significant contribution to climate-neutral energy production. Lucy Pao, corresponding member of the Austrian Academy of Sciences abroad and professor of electrical, computer, and energy engineering at the University of Colorado Boulder, has taken up this technical challenge.

In a lecture at the OeAW entitled „Efficient Wind Energy Systems: Challenges and Opportunities to Enable a Clean Energy Future“, she explains how wind turbines can be constructed more efficiently. Her lecture will take place on March 8th as part of this year’s International Women’s Day in the series „8ung auf Frauen“, an initiative by the female members of the OeAW aiming to shine a spotlight on women in research.

Lucy Pao has been a corresponding member abroad since 2021. She has shaped the field of modern control of wind turbines and wind farms by developing new adaptive nonlinear control and optimization algorithms as well as feed-forward controllers that make use of LiDAR measurements of inflowing wind conditions. She has thus laid the foundation for a significant increase in energy yield and a significant reduction in structural loads on wind turbines.



8ung
auf Frauen

REGISTRATION:

Registration required for in-person attendance: <https://www.oeaw.ac.at/anmeldung/8tungauffrauen>

COVID measures in force at the time apply.

The event can also be followed in the live stream: (no registration required): [oeaw.ac.at/veranstaltungen/live](https://www.oeaw.ac.at/veranstaltungen/live)