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Research presentation; CLOUDy climate change studies at CERN

Wednesday, 10 January 2018 10:30 (1 hour)

Presentation summary:
CLOUD (Cosmics Leaving Outdoor Droplets) experiment at CERN sharpens climate predictions and improves understanding of aerosol particles in the atmosphere and their effects on clouds. CLOUD is the world's leading experiment for laboratory studies of atmospheric aerosol formation and growth. Unique features include e.g. control of ionisation throughout tropospheric conditions, highly stable operation at any temperature in the range -75◦C to 50◦C, and the ability to create liquid or ice clouds clouds from aerosol particles formed in the chamber and then study their chemistry and microphysics. In addition, CLOUD is pioneering an innovative synergistic approach in which the model simulations guide the experiments as well as exploit the experimental results.
This is a big step forward in the reliability of models to describe climate interactions.

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