

The logo features the text "Forest & Photonics" in a bold, black, sans-serif font. The word "Forest" is on the left and "Photonics" is on the right. A central point from which multiple lines radiate outwards, resembling a starburst or a network diagram. The lines are in shades of green and yellow, with some ending in small circles. The background of the entire image is a scenic landscape of a forested hillside overlooking a large body of water under a cloudy sky.

Forest &

Photonics

Webinar - 1st December 2020

TOOLS FOR MANAGING BIOTIC FOREST DAMAGES



PROGRAM – TUESDAY 1st DECEMBER 2020

Starting at 14:00 EET (Helsinki), 13:00 CET (Berlin, Barcelona, Bilbao), 04:00 Vancouver
07:00 Detroit, Toronto, 9:00 Montevideo, 21:00 Tokio

14:00 **Opening of Forest&Photonics 2020 webinar**

14:10 **Biotic forest damages – A growing threat for forestry and forest industry**

- KEYNOTE: CASE Spruce Bark Beetle Damages in Germany / Dr. Ralf Petercord, Ministry for Environment, Agriculture, Conservation and Consumer Protection of the State of North Rhine-Westphalia (MULNV)
- KEYNOTE: CASE Fungi epidemic for Pinus radiata in Basque country / Oskar Azkarate, director, BaskEgur
- KEYNOTE: Climate change threats to forest survival from drought, heat and pests. / Dr. Henrik Hartmann, Max Planck Institute for Biogeochemistry

15:05 Short break

15:10 **A step back – Insect damages often start from wind damages**

- Climate modeling and satellite data analysis for identifying potential bark beetle areas caused by wind damages / Dr. Hilppa Gregow, Finnish Meteorological Institute

15:25 **Bugs at sight – identifying insect attack using remote sensing**

- Bark beetle risk analysis and modeling of epidemic development / Päivi Lyytikäinen-Saarenmaa, University of Helsinki, Department of Forest Sciences
- Experiences on detecting bark beetle damages from dead trees to “Green Attack” / Eija Honkavaara, National Land Survey of Finland
- Drones and satellites for forest health monitoring in Finland and forecasting cross-border outbreaks / Eugene Lopatin, LUKE – Natural Resources Institute Finland

16:15 Solutions

- Multispectral and hyperspectral cameras for collection of precision data from forests / Matti Rautiainen, Senop Ltd.
- CASE Sweden: Real-time analysis and machine learning for transforming early detection tree data into operational information / Jacob Hjalmarsson, CTO, Arboair Ltd
- Machine learning and real time analyze for hyperspectral detection of biological issues / Pasi Karppinen, CTO, ProtoRhino Ltd

17:00 Summary and conclusion of the Forest&Photonics 2020 webinar – Next Steps

17:10 End of Webinar

Business Joensuu Ltd. reserves the right to make changes to the program.

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 Joensuu Science Park

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