

# Managing forests in the 21st century

#### Location:

Potsdam Institute for Climate Impact Research (PIK), 14473 Potsdam Telegrafenberg A56, Conference room

#### **Remote Participation:**

ZOOM link to join the Sessions in the A56	ZOOM link to join the Sessions in the Big Cuppola
CONFERENCE ROOM:	<u>(A31)</u> :
https://pik-potsdam.zoom.us/j/307211631	https://pik-potsdam.zoom.us/j/720864416
Meeting ID: 307 211 631	Meeting ID: 720 864 416
Join by SIP: <u>307211631@zoomcrc.com</u>	Join by SIP: 720864416@zoomcrc.com

### Agenda

When	What	Where
	Tuesday 3-3-2020	
11.30	Begin of registration	A56 Foyer
12.00	Welcome Lunch (provided)	A56 Foyer
13:00	Welcome from the FORMASAM, FOREXCLIM & REFORCE projects	A56 Conference room
13:30	<ul> <li>Overview of the conference themes (Chair C. Reyer)</li> <li>Keynote (N Rühr) (30+15min)</li> <li>Invited speaker: Resilience/Management: (H Bugmann) (15+5min)</li> <li>Invited speaker: Mitigation/Timber cities (G Churkina) (15+5min)</li> </ul>	A56 Conference room
15:00	Poster session 1 & Coffee break	A56 Foyer
15.30	Parallel Session 1	A56 Conference room & Telepresence room
17.00	Poster session 2 & Coffee break	A56 Foyer
17.30	<ul> <li>Plenary: What are the impacts of climate extremes &amp; disturbances?</li> <li>(15+5min each) (Chair Annikki Mäkelä) <ul> <li>Invited Speaker: Maxime Cailleret</li> <li>Invited Speaker: Georges Kunstler</li> <li>Invited Speaker: Rupert Seidl</li> <li>Invited Speaker: Janet Maringer</li> </ul> </li> </ul>	A56 Foyer
19:30	Conference dinner: <u>Restaurant Oscar</u>	Mercure Hotel





Wednesday 4-3-2020		
9:00	<ul> <li>Plenary: What are the management challenges (and options) for resilient forests? (C. Reyer)</li> <li>keynote Klaus Puettmann (30+15min)</li> <li>keynote Carola Paul (30+15min)</li> </ul>	A56 Conference room
10:30	Poster session 3 & Coffee Break	A56 Foyer
11:00	Parallel Session 2	A56 Conference room, Telepresence room & Big Cupola (A31)
12:30	Lunch (provided) + group picture	A56 Foyer
13:30	<ul> <li>Plenary: "The state of Europe's forests after 2018 &amp; 2019" (Chair C. Reyer)</li> <li>John Schellnhuber: climate emergencies 2018/2019</li> <li>Marcus Lindner: <u>Video disturbances and risk</u></li> <li>Mart-Jan Schelhaas: latest Dutch NFI data from 2018/2019</li> <li>Allan Buras: Forest Condition Monitor (remote recorded)</li> </ul>	A56 Conference room
14:30	Coffee break	A56 Foyer
15:00	Parallel Session 3	A56 Conference room, A31 Big Cupola (A31)
16:30	Poster session 4 & Coffee break	A56 Foyer
17:00	<ul> <li>Plenary: What are the management challenges (and options) for resilient forests? (15+5min each) (Chair Rupert Seidl)</li> <li>Invited Speaker: Julius Sebald</li> <li>Invited Speaker: Hans Verkerk</li> <li>Invited Speaker: Laura Nikinmaa</li> <li>Invited Speaker: Marcus Lindner</li> </ul>	A56 Conference room
18:40	End of day 2 - Free time / no organised dinner	





	Thursday 5-3-2020		
9:00	<ul> <li>Plenary: What can we do to increase the contribution of forest management to climate change mitigation? (Chair C. Reyer)</li> <li>Keynote: Julia Pongratz (30+15min)</li> <li>Invited Speaker: Georgy Safonov (15+5min)</li> <li>Invited Speaker: Mart-Jan Schelhaas (15+5min)</li> <li>Invited Speaker: Annikki Mäkelä (15+5min)</li> <li>Poster award &amp; closing</li> </ul>	A56 Conference room	
10.45	Coffee break	A56 Foyer	
11.00	Parallel Session 4	A56 Conference room, A31 Big Cupola (A31)	
12:30	Lunch (provided)	A56 Foyer	
13:30	Field trip (optional)	see <u>separate file</u>	
17:00	End of Field Trip		



Poster session 1:

(03.03.2020 15:00-15:30)

# What are the impacts of climate extremes and disturbances?

	Title	Who
1	Assessing the protective value of forest included in soil protection category. A study case in forest district Rasca, Romania	Cosmin Cosofret
2	Carbon sequestration and economic impacts of wind, snow and root rot disturbances in Finland under climate change	Jonathan Holder
3	Revisiting forest resilience assessment	Thomas Ovenden
4	Managing wind storm risk in mixed stands through climate robust strategies	Robin Bourke
5	Did thermophilic tree species extend their distribution range due to climate change? Experiences from Slovenia	Matija Klopčič
6	An on-line tool for detecting large-scale disturbances in forests using MODIS satellite time series	Niki Ogris
7	Projecting regeneration failure under future climate and fire regimes for Greater Yellowstone	Werner Rammer



Poster session 2:

#### (03.03.2020 17:00-17:30)

# What are the impacts of climate extremes and disturbances?

	Title	Who
1	Microclimate Conditions in July in Clima Zonal Vegetation in Serbia	Zoran Galic, Dejan Stojanovic
2	Mapping forest resilience using remote sensing time series	Margot Verhulst
3	Factors influencing the diameter growth of beech, spruce and fir in uneven-aged forests in Dinaric Mountains, Slovenia under weak to moderate disturbances	Vasilije Trifković
4	Diagnosis of environmental restrictions across various forest types using the ecosystem flux model PRELES	Xianglin Tian
5	Title will follow	Aissa Aini
6	Social vulnerability to wildfires	María-Luisa Chas- Amil
7	Analysis of floodplain forest sensitivity to drought	Natalia Kowalska
8	Resistance and resilience of forests prone to ice damage	Dušan Roženbergar



Poster session 3:

# (04.03.2020 10:30-11:00)

What are the management challenges (and options) for resilient forests?

	Title	Who
1	Application of Geographic Information System (GIS) and Remote sensing technology in Forest Management	Lazizbek Ibragimov
2	Are Slovenian forests resilient to large and severe windthrows? - A decade of natural recovery dynamics	Matteo Cerioni
3	I-Maestro project: Innovative forest MAnagEment STrategies for a Resilient biOeconomy under climate change and disturbances	Thomas Cordonnier
4	Comparison of data sources on transport infrastructure for the regional forest fire management	Ekaterina Podolskaia
5	Retention forestry as an option for climate-resilient forests in Central Europe	Anamika Menon
6	Paying landowners and resilience in forest ecosystems	María-Luisa Chas- Amil
7	Modelling future forest management options in the dynamic vegetation model LPJ-GUESS	Mats Lindeskog
8	Forests in an uncertain context: comparing contrasting strategies of risk management at the local and regional scales	Joanna Horemans



Poster session 4:

(04.03.2020 16:30-17:00)

What can we do to increase the contribution of forest management to climate change mitigation?

	Title	Who
1	Decision-making behavior of forest managers and owners in adapting forest management to climate change	Sophie Labonne
2	Adaptation Strategies for Spruce Sites – Climate-sensitive Modelling of the Economic Influences of Bark Beetle Management and Cultivation of Alternative Tree Species	Jasper Fuchs
3	Scaling factors to adjust yield tables with mechanistic forest growth modelling: predicting wood availability under climate change	Ilié Storms
4	Contribution of forest management to climate mitigation and adaptation – A multi Earth System Model perspective	Quentin Lejeune
5	Acceptable forest landscape composition for all – optimizing for multiple ecosystem services with different stakeholder groups	Claudia Chreptun
6	Biomass and structure of uneven-aged Norway spruce stands in southern Finland	Atte Kumpu
7	Modelling carbon sequestration in Finnish forests: A climate and harvest level scenario case study	Jonathan Holder
8	PROFOUND Meet & Greet Poster	Christopher Reyer





Parallel session 1:

(03.03.2020 15:30-17:00)

	Management modelling 1 A56 Conference Room Chair: Andy Krause	<b>Resilience</b> A56 Telepresence Room Chair: Werner Rammer
1	Simulated effects of tree species diversity and species pattern on biomass production at stand level by Thomas Kainz	How to better understand the adaptive capacity of Social-Ecological Systems to absorb climate extremes by Kirsten Thonicke
2	Locally adapted stand-scale forest management alternatives for the 21st century by Mats Mahnken	Resilience of multiple ecosystem services and biodiversity in a temperate forest by Elena Cantarello
3	Socially optimal forest management and biodiversity conservation in temperate forests under climate change by Andrey Lessa Derci Augustynczik	Directing structural development can improve the functional response diversity of forests to climate change in northeastern North America by Dominik Thom
4	How to consider forest regeneration in process-based models? Interaction of physiology, environment and management by Rüdiger Grote	Variable rooting strategies stabilize biome productivity by Boris Sakschewski
5	The carbon balance of boreal old-growth forests by Anu Akujärvi	Drought responses of Amazon forests under climate change: The contrasting roles of soil moisture and canopy responses by Hao-Wei Wey
6	Forest and Woodlands in Brandenburg by Michael Duhr	





Parallel session 2:

(04.03.2020 11:00-12:30)

	<b>Empirical management</b> A56 Conference Room Chair: Dominik Thom	<b>Empirical impacts 1</b> A31 Big Cupola Chair: Björn Reineking
1	Does competition influence tree response to drought? by Daniele Castagneri	Seasonal changes in the most limiting factor for Gross Primary Production in a semi-arid forest by Daniel Nadal-Sala
2	The REINFFORCE infrastructure network for monitoring and adapting Atlantic forests under a changing climate. First empirical evidences on the potential adaptive performance of alternative species by Hernán Serrano-León	Mountain forest growth response to climate change in the Northern Limestone Alps by Claudia Hartl (cancelled)
3	Forests and landscape temperature management by Pierre Ibisch	Changes in site productivity as one of the factors increasing the forest dieback risk by Jarosław Socha
4	Forest microclimate and management under climate change: insights from forests and plantation in north-eastern Germany by Jeanette Blumroeder	Relations between radial growth of European beech and remotely sensed indices across Europe by Dejan Stojanović
5	Phenotypic plasticity and local adaptation of Fagus sylvatica and its implications for assisted migration by Jonas Schmeddes	Frost and drought: effects of extreme weather events on Stem Carbon dynamic in a Mediterranean beech forest by Negar Rezaei (remote)
6	To what extent can silviculture drive adaptability to changes in disturbance regimes? Formalizing a disturbance impact regime for integration into a demo-genetic model by Victor Fririon (remote)	Anthropogenic land-use legacies underlie Mediterranean forest vulnerability to climate change by Julen Astigarraga (remote)





Parallel session 3:

(04.03.2020 15:00-16:30)

	Management modelling 2 A56 Conference Room Chair: Mart-Jan Schelhaas	Management challenges A31 Big Cupola Chair: Hans Verkerk
1	Efficiency of bark beetle management threatened by climate change by Laura Dobor (remote)	Uncertainty of Carbon Forestry by Rasoul Yousefpour
2	The effect of landscape structure on the climate resilience of lowland Norway spruce forests by Juha Honkaniemi (remote)	Economic Impact of climate change on forestry: An analysis at European scale by María-Luisa Chas-Amil
3	Thinking new about forest management - A reflexive collaboration process to adapt local forests to climate change by Isabella Hallberg-Sramek (remote)	The CO2 storage balance – a method for more comprehensively assessing GHG implications of wood use by Hannes Böttcher
4	Seeing forest landscapes as functional complex networks: a way to enhance resilience to climate change and disturbances by Marco Mina	Forest challenges under climate change with technical, scientific, social, economic and political options by Jean-Luc Peyron (remote)
5	Transition to multifunctional forest management in EU28 – transition costs and implications to forest sector by Pekka Lauri	Adaptedness versus adaptability: Forest genetic management as a tool to mitigate climate change effect on forests by Sven Herzog
6	Modelling the potential of Douglas-fir in future European forests using LPJ-GUESS by Sebastian Karaytug	Types of Uncertainties and Possible Legal Responses in GI Strategy (e.g. Adaptive Forest Management, USA) by Yelena Gordeeva





Parallel session 4:

(05.03.2020 11:00-12:30

	<b>Mitigation modelling</b> A56 Conference Room Chair: Annikki Mäkelä	<b>Empirical impacts 2</b> A31 Big Cupola Chair: Rupert Seidl
1	Little leeway to increase Northern European forests climate change mitigation capacity through alternative management by Daniela Dalmonech & Gina Marano	Managing forest age and structure for C mitigation by Federico Magnani (cancelled)
2	Ensemble of forest impact models for analysing the variability of carbon sink projections by Tuomo Kalliokoski	A new Multiscale Framework for assessing impacts of climate change on Central European forests: MuFfin by Tomáš Hlásny (remote)
3	Searching for an optimal harvest- regeneration system using multi-criteria analysis by Katarina Merganicova	Quantifying impacts of the drought 2018 on European ecosystems in comparison to 2003 by Allan Buras (remote recorded)
4	A regional assessment of land-based carbon mitigation potentials: bioenergy, BECCS, reforestation, and forest management by Andreas Krause	Environmental and climate controls of Pine sawfly outbreaks by Mikko Peltoniemi
5	Forest management options for timber production and carbon sequestration: Insights from a land-use model by Abhijeet Mishra	Colonization and extinction dynamics match the distribution of European trees at continental scale by Arnaud Guyennon
6	Impact of simulated present and historic management regimes on forest carbon cycling in Europe by Christine Herschlein	A five-step model calibration-validation procedure allows to anticipate water-demanding eucalypt tree species' responses to changes in environmental drivers by Santi Sabaté