

## 2012 EASTERN SNOW CONFERENCE MEETING PROGRAM

### Arrival: Tuesday 5 June 2012

- 3:00- 7pm First, go to Welcome Center, Frost Valley YMCA. Obtain Parking Pass, Map, Lodging Confirmation and ESC Welcome Sheet
- 6:00 pm Registration for conference at Geyer Lodge, Frost Valley YMCA
- 7:00 pm Ice breaker reception in Geyer Dining Room
- 8:30 pm ESC Executive Pre-Conference Meeting in Geyer Lodge Board Room (#2)

### Day 1: Wednesday 6 June 2012

- 7:00 am **Breakfast** in Geyer Dining Room
- 7:30 am Registration for conference at Geyer Lodge
- 8:20 am Welcome: Conference Program Chair

#### **Snow monitoring networks (Chair: R Brown)**

- 8:30 am Brown et al.: Developing a snow cover component for the WMO Global Cryosphere Watch
- 8:50 am Fleetwood: Environment Canada National Snow Measurement Network Project
- 9:10 am Burakowski et al.: Putting the Capital 'A' in CoCoRAHS: An experimental program to measure albedo using the Community Collaborative Rain Hail and Snow (CoCoRAHS) Network
- 9:30 am Semens et al.: Detecting and assessing the effects of early melt events with remote sensing and a new ground-based snow monitoring array
- 9:50 am Kelly et al.: The Snowtweets Project: near real-time mapping snow information using social media and remote sensing
- 10:10 am **Coffee Break and Poster Paper Viewing**

#### **Watershed Hydrology: streamflow (Chair: D C Pierson)**

- 11:00 am Pierson et al.: Changes in the timing of snowmelt, and the seasonality of nutrient loading: can models simulate the impacts on freshwater trophic status?
- 11:20 am Mukundan et al.: Turbidity in a New York City water supply stream: sensitivity to projected changes in winter streamflow
- 11:40 am Samal et al.: Turbidity in a New York City water supply reservoir: sensitivity to anticipated future changes in winter turbidity loading
- 12:00 pm **Lunch** in Geyer Dining Room
- 12:45 pm **Long-term acid and mercury deposition and USGS gage site tour** (Mr. Ben Snyder, Director of Natural Resources and Environmental Science, Watershed Qualified Forester)

**Watershed Hydrology: precipitation and snowpack modeling (Chair: E M Schneiderman)**

- 2:40 pm Schneiderman et al.: Comparison of spatially-distributed snowpack models for New York City watersheds
- 3:00 pm Zion et al.: Influence of winter snowpack on seasonal streamflow for the Catskill Mountain region
- 3:20 pm Anandhi et al.: AR4 models bias in projections of future climate changes over Catskill Mountain watersheds, NY, USA.
- 3:40 pm Pradhanang et al.: Rain-on-snow events in New York
- 4:00 pm **Coffee Break and Poster Paper Viewing**

**Advances in snow measurements and modeling (Chair: A Langlois)**

- 4:30 pm Langlois et al.: Evaluating CRCM4 snow cover properties simulations from the Canadian Land Surface Scheme (CLASS 2.7 and 3.5) in Northern Québec, Canada
- 4:50 pm Bergeron et al.: Evaluating CRCM4 snow melt dynamics simulations from the Canadian Land Surface Scheme (CLASS 2.7 and 3.5) in Northern Quebec, Canada
- 5:10 pm Daly et al.: Extreme values of snow water equivalent
- 5:30 pm Kasurak et al.: A simple in-situ sensor for snow grain size
- 7:00 pm **ESC Banquet** in Geyer Dining Room
- 8:00 pm **Key Note Speaker, David A. Robinson:** Hemispheric to regional dimensions of snow covered extent
- 9:00 pm **Fireside chat + music downhill from Geyer Hall**

Day 2: Thursday 7 June 2012

- 7:00 am **Breakfast** in Geyer Dining Room

**Glaciology and sea-ice (Chair: K J Bayr)**

- 8:30 am Bayr et al.: Influence of the recession of the Pasterze Glacier, Austria, on water discharge used for hydro-power production
- 8:50 am Hopkins et al. (presented by Joan Ramage): Passive microwave analysis of high arctic glacial melt characteristics: Severnaya Zemlya, Russia.
- 9:10 am Pelto et al.: Rising ELA leads to initiation of rapid retreat of Brady Glacier, Alaska
- 9:30 am Frei et al.: Evidence relating diminished Arctic sea ice to Siberian snow cover
- 9:50 am **Coffee Break and Poster Paper Viewing**

**Remote sensing of snow and ice: micro to watershed scale (Chair: B Forman)**

- 10:40 am Montpetit et al.: Snow microwave emission modeling of ice lenses within the snowpack using the Microwave Emission Model for Layered Snowpacks (MEMLS)
- 11:00 am Muñoz et al.: CREST-Snow Field Experiment: analysis of snowpack properties using multi-frequency microwave remote sensing data
- 11:20 am McDonald et al.: Mapping soil freeze/thaw and inland ice using a multi-satellite approach for improved understanding of hydrological and ecologic processes
- 11:40 am Sundström et al.: Estimation of snow water equivalent of dry snowpacks using a multi-offset ground penetrating radar system
- 12:00 pm **Lunch** in Geyer Dining Room

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**Remote sensing of snow and ice: regional to hemispheric scale (Chair: S R Helfrich)**


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- 1:00 pm Helfrich et al.: The next generation of the interactive multi-sensor snow and Ice Mapping System (IMS)
- 1:20 pm Vuyovich et al.: Comparison of passive microwave and NOHRSC estimates of total watershed SWE in the conterminous U.S.
- 1:40 pm Forman et al.: Estimating AMSR-E passive microwave brightness temperature over snow-covered land in North America using a land surface model and an artificial neural network
- 2:00 pm **END**  
**Voluntary field excursion to Department of Environmental Protection snow instrumentation site.**
- 3:00 pm ESC Executive Post-Conference Meeting Geyer Lodge Board Room (#2)

## POSTER PRESENTATIONS (CONCURRENT)

### REMOTE SENSING OF SNOW AND ICE

### GEYER HALL ROOM 1

1. Bergeron et al.: Snow cover estimation from blended optical and passive microwave satellite remote sensing data for improved springflood forecast in Quebec, Canada
2. Daly et al.: Estimates of snowpack properties of the Tigris and Euphrates watersheds using multispectral and passive microwave remote sensing
3. Durand et al.: Passive microwave remote sensing of snow: several recent advances
4. Hall et al.: Use of MODIS snow-cover maps for Detecting Snowmelt Trends in North America
5. Jasinski and Stoll: Feasibility of estimating snow depth in complex terrain using satellite lidar altimetry
6. Li et al.: Estimating snow water equivalent and melt timing in Tulare basin via assimilating downscaled AMSR-E observations into high-resolution modeling framework
7. Riggs and Hall: Snow cover detection on mountains improved in revised MODIS snow-cover algorithm
8. Shahroudi and Rossow: Microwave emissivities of land surfaces: detection of snow over different surface types
9. Shuman et al.: Two dozen years of temperature observations at Summit: central Greenland automatic weather stations 1987-2011
10. Sugg et al.: Satellite and surface perspectives of snow extent in the southern Appalachian Mountains
11. Vander Jagt and Durand: How vegetation affects the ability to estimate large-scale SWE from microwave measurements in alpine areas
12. Zhao and Ramage: Melt patterns of glaciers in Hindu Kush-Himalayas (HKH) based on passive microwave data (AMSR-E)

**WATERSHED HYDROLOGY****GEYER HALL ROOM 3**

13. Bogonko et al.: Observations and modeling of snow melt in the Connecticut River watershed
14. Infante et al.: Toward assimilation of merged satellite and model based snowpack properties for flood forecasting using hydrological models
15. Leathers et al.: Relationships between snow cover ablation, atmospheric teleconnections, synoptic type frequencies and winter season Chesapeake Bay hydrology
16. Malloy: An analysis of the water loss from a seasonal snowpack due to sublimation at Hubbard Brook Experimental Forest
17. Sheerwood and Perry: Observations of snow crystal type and degree of riming during snow events in the southern Appalachian Mountains
18. Welker and Perry: Backward air trajectories associated with snowfall events in the southern Appalachian Mountains: 2006 to 2011

**ADVANCES IN SNOW MONITORING AND MODELING****GEYER HALL ROOM 5**

19. Ecclestone et al.: The Québec/Labrador Peninsula and the evolution of the Eastern Snow Conference
20. Roy et al.: Snow specific surface area simulation using the one-layer CLASS snow model for brightness temperature simulation
21. Toupin: Pioneers through winter in North America: Paleo-Indians and Paleo-Eskimos.
22. Vermette and Kanack: Modeling frost line soil penetration using freezing degree-day rates, day-length, and sun-angle
23. Wright: Performance analysis of GMON3 snow water equivalency sensor

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# Geyer Hall

## Venue Layout Map

69<sup>th</sup> Eastern Snow Conference, Frost Valley YMCA, NY, 5-7 June 2012  
(posters in rooms 1, 3 and 5, corporate sponsors display downstairs)



