

## Agenda

# Workshop on The Future of Cloud Parameterization

**May 7-9, 2003, Princeville, Kauai**

*Welcoming reception (with cash bar) on Tuesday evening May 6,  
The Bay Terrace, Princeville Resort, 6:30 -- 8:00 p.m.*

**Wednesday May 7**

<b>Morning session chaired by David Randall</b>			
<b>08:30</b>	David Randall and Jay Fein	CSU and NSF	Introductory overview
<b>09:30</b>	<b>Marat Khairoutdinov</b>	CSU	Ongoing super-parameterization work at CSU
<b>10:15</b>	<b>Break</b>		
<b>10:35</b>	Charlotte DeMott	CSU	Tropical variability in the Super-CAM
<b>10:55</b>	Kazuo Saito	JMA	Cloud and convection in the JMA NWP models
<b>11:15</b>	<b>Steve Lord</b>	NCEP	Operational Cumulus Parameterization Requirements at the NCEP Environmental Modeling Center 2003-2009
<b>12:00</b>	<b>Lunch</b>		
<b>Afternoon session chaired by Steve Krueger</b>			
<b>13:30</b>	<b>Wojciech Grabowski</b>	NCAR	Using super-parameterization in the clouds-in-climate problem
<b>14:15</b>	Mitch Moncrieff	NCAR	A Dynamical Model of MJO-like Coherence
<b>14:35</b>	Hiroaki Miura and Masahide Kimoto	CCSR	Cumulus ensemble simulation using a cloud resolving model.
<b>14:55</b>	Leo Donner	GFDL	Large-Scale Convective Sources from Two- and Three-Dimensional Cloud-System-Resolving Models
<b>15:15</b>	<b>Break</b>		
<b>15:35</b>	Kuan-Man Xu	NASA Langley Research Center	A satellite cloud, radiation and precipitation data set for cloud-model evaluation
<b>15:55</b>	Ming-Hua Zhang	SUNY Stonybrook	Cloud parameterizations: How good is good enough, and design of observational tests
<b>16:15</b>	Christian Jakob	BMRC	Evaluating Cloud Resolving Model simulations - Where are the gaps and how do we fill them?
<b>16:35</b>	<b>Discussion</b>		
<b>17:30</b>	<b>Adjourn for the day</b>		
<b>19:00</b>	<b>Group dinner</b>		

**Thursday May 8**

<b>Morning session chaired by Tom Ackerman</b>			
<i>08:30</i>	<b>Akio Arakawa and Joon-Hee Jung</b>	UCLA	The Convergence Problem of Model Physics and Design of a Quasi-3D Super-Parameterization
<i>09:15</i>	Joon-Hee Jung and Akio Arakawa	UCLA	A Preliminary Test of Super-parameterization in an Idealized Framework
<i>09:35</i>	Steve Krueger	U. Utah	2D cloud system resolving models: Simulation or parameterization?
<i>09:55</i>	Chin-Hoh Moeng	NCAR	Parameterization of turbulent transport and cloud properties in PBLs over complex terrain and heterogeneous land use
<i>10:15</i>	<b>Break</b>		
<i>10:30</i>	<b>Akimasa Sumi</b>	CCSR	Comparison of convective heating in the simulation of super cluster on an aqua-planet by using a regional model
<i>11:15</i>	Sonia Kreidenweis	CSU	Future directions in modeling aerosol-cloud interactions
<i>11:35</i>	Andy Heymsfield	NCAR	Parameterizations of Ice Particle Size Distributions and Bulk Microphysical Properties for Cirrus and Stratiform Ice Cloud Layers
<i>11:55</i>	Howard Barker	Met. Serv. Canada	Radiative transfer calculations in regular and super-parameterized GCMs
<i>12:15</i>	<b>Lunch</b>		
<b>Afternoon session chaired by Akimasa Sumi</b>			
<i>13:30</i>	<b>Bjorn Stevens</b>	UCLA	Adjustment Revisited
<i>14:15</i>	Tomoe Nasuno and Teruyuki Kato	FRSGC and MRI/JMA	Estimation of subgrid scale processes using a cloud-resolving model.
<i>14:35</i>	Cara-Lyn Lappen	CSU	The future PBL parameterization of the Colorado State University GCM
<i>14:55</i>	Tom Ackerman	PNNL	Testing Super-parameterization Results with ARM Data: Initial Results and Plans for Future Research.
<i>15:15</i>	<b>Break</b>		
<i>15:30</i>	Ric Cederwall and Jerry Potter	LLNL	Evaluation of Climate Model Parameterizations Using the DOE CCpp-ARM Parameterization Testbed (CAPT)
<i>15:50</i>	Christian Jakob	BMRC	The use of cloud radar observations for model evaluation: A probabilistic approach.
<i>16:20</i>	Steve Krueger and Y. Luo	U. Utah	Using cloud radar and satellite measurements to evaluate CSRMs
<i>16:40</i>	<b>Discussion</b>		
<i>17:30</i>	<b>Adjourn for the day</b>		

**Friday**

<b>Morning session chaired by Christian Jakob</b>			
<b>08:30</b>	<b>Wayne Schubert</b>	CSU	Dream GCMs and Super-Parameterizations
<b>9:15</b>	Jim Hack	NCAR	Idealized Frameworks for the Diagnosis and Evaluation of Parameterized Physics
<b>9:35</b>	Robert Pincus	NOAA CDC	Looking over each others shoulders: What can explicit and traditional cloud parameterizations learn from one another?
<b>9:55</b>	Wei-Kuo Tao, Arthur Hou, Robert Atlas, David Starr and Yogesh Sud	NASA GSFC	Precipitation Processes Observed During ARM, TOGA COARE, GATE, SCSMEX, and KWAJEX: Consistent 2D, semi-3D and 3D Cloud Resolving Model Simulations
<b>10:15</b>	<b>Break</b>		
<b>10:30</b>	<b>Masaki Satoh, Hirofumi Tomita, Koji Goto, and Tomoe Nasuno</b>	FRSGC/Saitama Institute of Technology	Development of the nonhydrostatic icosahedral atmospheric model in Frontier Research System for Global Change
<b>11:15</b>	Tsuneaki Suzuki, Seita Emori, Teruyuki Nishimura and Shinji Matsumura	FRSGC	The role of convective triggering in an AGCM
<b>11:35</b>	Phil Duffy, Balasrbrumian "Bala" Govindasamy, Jeremy Coquard, John Iorio, Karl Taylor	LLNL	High resolution simulations of global climate
<b>11:55</b>	Martin Miller	ECMWF	TBD
<b>12:15</b>	<b>Lunch</b>		
<b>Afternoon session chaired by David Randall</b>			
<b>1:30</b>	<b>Graeme Stephens and Norm Wood</b>	CSU	Diagnosing Cloud Radiation Feedbacks with Super-Parameterization
<b>14:15</b>	Bill Rossow	NASA GISS	Some Ideas on How to Evaluate a Cloud Parameterization in a GCM
<b>14:35</b>	Chris Kummerow	CSU	Rainfall monitoring in 2010 - Prospects for a synergistic approach between model and observation.
<b>14:55</b>	Scott Denning	CSU	Cloud-scale mass fluxes and tracer transport inversions: New ways to study the global carbon cycle from the air
<b>15:15</b>	<b>Break</b>		
<b>15:35</b>	<b>What happens next</b>		
<b>17:00</b>	<b>Workshop ends</b>		