BIRS Conference on Multiscale processes in the tropics, April 27- May 01, 2009

Each talk is 30 minutes long PLUS 5 minutes for questions.

Monday

Chair: Khouider

9:15—9:30 : Welcoming remarks

9:30--10:15 : Majda, The Skeleton of the MJO and Moist Multi-Scale Models for the Hurricane Embryo

10:15—10:55: Coffee break

10:55--11:30 : Johnson, The Diurnal Cycle and the MJO

11:30 –-12:05 : Austin, Entrainment and Detrainment in trade cumulus clouds

12:05—13:30 : Lunch

13—13:30: **Banff Centre tour**

Chair: Monahan

13:30—14:05: Kiladis, Forcing of Convectively Coupled Kelvin Waves by Extratropical Wave Activity

14:05—14:40 : Jia-Lin Lin, The Tropical Biases in IPCC AR4 Coupled GCMs

14:40—15:15: Coffee Break

15:15--15:50 : Takayabu, Shallow and deep modes of tropical precipitation heating and their relationship to large-scale environments

15:50—16:25 : Dunkerton, Tropical waves, tropical cyclogenesis and more tropical waves

16:25—17 : Tulich, Tropical squall lines as convectively coupled gravity waves: Why do most systems travel westward?

Tuesday

Chair: Majda

9--9:35 : Montgomery, Multiscale aspects of tropical cyclogenesis.

9:35—10:10 : Klein, Columnar Clouds and Internal Waves

10:10—10:45: Coffee break

10:45--11:30 : Biello, PDEs and Asymptotics for the Tropical Atmosphere

11:30 ––12:05 : Owinoh, Multiscale Modelling of Stratocumulus Clouds

12:05—13:30 : Lunch

Chair: McFarlane

13:30—14:05: Waliser, Vertical Structure And Processes Revealed With Recent Satellite Data

14:05—14:40: Haertl, LO and behold the Madden Julian Oscillation?

14:40—15:15: Coffee Break

15:15 ––15:50: Mapes, Toward understanding the MJO through a data assimilating model framework

15:50—16:25 : Yang, Gui-Ying, Convectively Coupled Equatorial Waves

16:25—17: Ajaya Mohan, Regional influences of ocean-atmosphere interaction on intraseasonal variability assessed using partial coupling

Wednesday

Chair: Kiladis

9:00--9:35 : McFarlane, Energy Conservation for Cumulus Parameterization

9:35—10:10 : Shaw, Using wave-activity conservation laws to understand the generation of subgrid-scale energy and momentum

10:10--10:40 : Coffee break

10:40 ––11:15 : Zhang, Bimodality in the Vertical Structure of Tropical Convection

11:15—11:50 : Muraki, A Potential Vorticity Dynamics for Shallow Water on the Sphere

11:50—12:25: Hai Lin, Interactions between the Madden-Julian Oscillation and the North Atlantic Oscillation

12--13:30 : Lunch

Free afternoon: Participants are encouraged to go for hikes in the Banff National Park and surrounding areas.

Thursday

Chair: Muraki

9--9:35 : Smith, Roger, Tropical cyclone intensification

9:35—10:10 : Roundy, Convectively coupled internal waves of the free troposphere

10:10—10:15: **Group Photo**

10:10—10:55: Coffee break

10:55--11:30: Khouider, A Stochastic Multicloud Model for Organized Tropical Convection

11:30 -–12:05: Stechmann, Convectively Coupled Gravity Waves in Shear

12:05—13:30: Lunch

Chair: Zhang

13:30—14:05 : Frierson, Experiments with a Hierarchy of GCMs: ITCZ Response to High Latitude Forcing, and Tropical Variability

14:05—14:40 : Pauluis, Impacts of the global distribution of precipitation on the propagation of convectively coupled waves

14:40—15:15: Coffee Break

15:15 –-15:50: Waite, Boundary layer dynamics in a simple model for convectively coupled gravity waves

15:50—16:25 : Davoudi, Fluctuation of mass flux in a cloud resolving simulation with interactive radiation

16:25—17 : Smith, Leslie, On Wave Interactions in Strongly Stratified Flows

Friday

Chair: Austin

9:00—9:35 : Monahan, The Probability Distribution of Sea Surface Winds: Effects of Variable Surface Stratification and Boundary Layer Thickness

9:35—10:10: : Dolaptchiev, Asymptotic models for the planetary and synoptic scales in the atmosphere
10:10--11 : Coffee break

11 –12: Open discussion and wrap up.

12--13:30 : Lunch