Detailed Program for The Symposium on Physical Aspects of Global
and Regional Climate Dynamics
14-15 January 2014
Sede Boqer Campus
Ben-Gurion University of the Negev

Keynote Speaker:
Prof. Geoffrey Vallis, Mathematics Department, University of Exeter, UK

Tuesday, Jan. 14, 2014:

8:00 Departure of the bus from Re'em Junction to Sede Boqer
10:00 Short opening words by the organizers and the BIDR director
10:15 Geoffrey Vallis, GFD problems in global warming.
10:45 Yaron Toledo, The approximated surface quasi-geostrophic model.
11:05 Avi Goz, Nonlinear interactions between a basin-wide gyre and topography in the gulf of Eilat.
11:20 Oded Padon, Non-hydrostatic effects in the Dead-Sea.
11:35 Coffee break
12:00 Georgy Burde, Ordering of two small parameters in the shallow water wave problem.
12:20 Yair De-Leon, Rossby and Poincare Waves in an ocean over a rotating sphere.
12:35 Ehud Yarom. Experimental observation of inertial wave turbulence.
12:50 Yair Zarmi, Mapping solitons onto particle-like structures.
13:10 Lunch break + poster session.
15:00 Brenda Quinn, Feedback of zonal flows on wave turbulence driven by small scale instability.
15:15 Vered Silverman, Interaction between ozone and planetary waves in the stratosphere.
15:30 Rei Chemke, Poleward migration of jets.
15:45 Yair Cohen, Regular and anomalous ocean eddies: a unified formulation and linear stability analysis in a two layer shallow water model.
16:00 Hilla Afargan, A midwinter minimum in storm track activity in an idealized GCM with a seasonal cycle.
16:15 Talia Tamarin, Eddy- mean flow interaction in storm tracks.
16:30 Coffee break
16:50 Dong Zhou, Phase transition properties of coupled climate networks.
17:05 Eli Galanti, Estimating Jupiter's winds using the Juno expected measurements, a trajectory estimation model, and an adjoint based thermal wind model.
17:25 Orli Lachmy, Characteristics of three flow regimes of the upper tropospheric jet stream.
17:40 Roiy Sayag, Dynamics of ice sheet grounding zones under tidal forcing
18:00 Eli Tziperman, Significant consequences of explicit representation of atmospheric convection at high CO_2 concentration
19:00 Dinner
20:30 Social activity.

Wednesday, Jan. 15, 2014:
Short course for graduate students. [Others are welcome to attend the course.]

7:00-8:00 Breakfast
8:00-10:30 Short hike to Wadi Karakash
11:00-12:00 Nathan Paldor, The shallow water equations over a sphere:
New solution and global ocean models
12:10-13:10 Geoffrey Vallis, A theory of the meridional overturning circulation of the ocean.
13:15 Lunch break
14:30-15:30 Geoffrey Vallis, Superrotation in terrestrial planetary atmospheres: still mysterious.
15:30-16:00 Coffee break
16:00-17:00 Eli Tziperman, Internal waves resonant interactions and special triads.
17:30 Bus to the center

Posters:

Yossi Ashkenazy, Turbulent snowball ocean.
Hezi Gildor, Uncertainties and complexities in small-scale ocean surface mixing processes.
Nili Harnik, Extreme weather and climate events in relation to jet-storm track regimes.
Yohai Kaspi, Atmospheric dynamics on terrestrial exoplanets.
Elad Shilo, Sand dunes albedo climate feedback.
Ehud Strobach, Improving climate predictions and reducing their uncertainties using a sequential learning algorithm.