



# GFD days 2015 (III)



The Swiss Institute for Dryland Environmental and Energy Research  
Alexandre Yersin Department of Solar Energy and Environmental Physics (YDSEEP)  
The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev

## Monday, Jan. 19

08:00 Departure of the bus from Weizmann Institute to Sede Boqer

10:00 Opening words: Boris Zaltzman, Director, Jacob Blaustein Inst. For Desert Research

### 10:15 Oral session I (Chair: E. Tziperman)

10:15 Keynote lecture: Brian Farrell  
*Conceptual basis of Statistical State Dynamics*

11:15 Coffee break

### 11:50 Oral session II (Chair: E. Tziperman)

11:50 Chaim Garfinkel  
*Tropospheric Rossby wave breaking and variability of the latitude of the eddy-driven jets*

12:10 Janni Yuval  
*Eddy activity sensitivity to changes in the vertical structure of baroclinicity*

12:25 Vered Silverman  
*Ozone and planetary waves in the stratosphere*

12:40 Hilla Afargan  
*Distribution and intensity of storm track activity in an idealized GCM with a seasonal cycle*

12:55 Rei Chemke  
*The latitudinal dependence of jet spacing and macroturbulent energy cascades in the atmosphere*

### 13:10 Lunch break + Poster session

Abigail Bodner  
*The effects of stationary forcing on global circulation regimes*

Yohai Kaspi  
*Utilizing the upcoming gravity measurements by Cassini's proximal orbits for studying the atmospheric dynamics on Saturn*

Ayah Lazar  
*Zonal variations of eddy diffusivities in an ACC-like channel: discrete transport corridors*

Ro'iy Sayag  
*Gravity currents over porous substrate with finite entry pressure*

Eli Tziperman  
*A predictive model for the sea ice floe size distribution*

### 15:00 Oral session III (Chair: Y. Kaspi)

15:00 Yair Zarmi  
*Structure of asymptotic soliton webs in two-dimensional shallow water equation*

15:20 Yael Amitai  
*Multiple equilibria in eastern Mediterranean deep-water formation*

15:35 Yonatan Goldsmith  
*The modern and LGM hydrological cycles of the eastern Mediterranean and the Levant from a water isotope perspective*

15:50 Hezi Gildor  
*Is light spectrum pose an upper bound on SST?*

16:10 Coffee break

**16:40 Oral session IV (Chair: H. Gildor)**

- 16:40 Nathan Paldor  
*Linear waves on Earth: Is the Coriolis parameter overrated in planar wave models?*
- 17:00 Talia Tamarin  
*The poleward tilt of storm tracks from a PV tendency analysis of cyclone tracking composites*
- 17:15 Keynote lecture: Brian Farrell  
*Introduction to the theory of Statistical State Dynamics*
- 18:15 Room check-in
- 19:00 Dinner
- 20:30 Star Gazing

**Tuesday, Jan. 20**

7:00 Breakfast

8:00 Hike

**12:00 Oral session V (Chair: N. Paldor)**

- 12:00 Keynote lecture: Brian Farrell  
*Statistical State Dynamics of baroclinic turbulence*

13:00 Lunch break

**14:00 Oral session VI (Chair: N. Paldor)**

- 14:00 Ehud Gavze  
*Effect of non normal growth on the orientation dynamics of spheroids in linear shear flows*
- 14:20 Ehud Strobach  
*The relative contribution of various factors to the uncertainty in decadal climate predictions*
- 14:35 Yehuda Arav  
*Dispersion in a canyon by katabatic wind*
- 14:50 Lilly Verso  
*Experimental study of the initial growth of a localized turbulent patch in a stably stratified fluid*
- 15:05 Nili Harnik  
*The involvement of circumglobal wave packets in forcing stratosphere wind anomalies*
- 15:25 Coffee break

**15:55 Oral session VII (Chair: N. Harnik)**

- 15:55 Eli Galanti  
*How fast does Saturn rotate? A determination of Saturn's rotation period from its gravitational field*
- 16:15 Marzia Parisi  
*Detecting the depth of Jupiter's vortices with the Juno gravity measurements*
- 16:30 Orli Lachmy  
*Equilibration of the wave spectrum in different jet regimes*
- 16:45 Yair Cohen  
*Why is the stable structure of baroclinic eddies still an open question?*
- 17:00 Avi Gozolchiani  
*Significant effects of geothermal heating on a local ocean basin overturning circulation*
- 17:15 Georgy Burde  
*Higher order effects in water waves*
- 18:00 Bus to north