SCHEDULE

Monday, 7.1.2013
8:55 Shuttle from Beer Sheva North (University) train station.

9:45 Welcome

10:00-11:00 Barbara Terhal (Physics, Aachen), Bounds on reliable classical and quantum Information storage in a volume of space.

11:30-12:30 Aharon Davidson (Physics, BGU), TBA.

12:30-2:00 Lunch

2:00-3:00 Amos Lapidoth (EE, ETH Zurich), Three notions of channel capacity.

3:30-4:30 Michael Ben-Or, (CS, HUJI), The quantum refrigerator.

5:00-6:00 Scott Aaronson (CS, M.I.T.), (By video), How much information is in a quantum state.

7:00 Workshop dinner

8:30 Shuttle to Beer Sheva.

Tuesday
8:55 Shuttle from Beer Sheva North (University) train station.

10-11 Yoram Louzoun, (Math and Brain studies, Bar-Ilan), Evolving information content of the Immunoglobulin repertoire - Real time evolution and adaptation.

11:30-12:30 Naftali Tishby, (CS and Neuroscience, HUJI), Information and control in perception and action - the fundamental duality.
12:30-2 Lunch

2-3 Dorit Aharonov, (CS, HUJI), TBA.

3:30-4:30 Paul Cuff (EE, Princeton), How Structure Affects Information Transfer.

5-6 Neri Merhav, (EE, Technion), A statistical-mechanical view of code ensembles and random coding exponents.

6:30-7:30 short presentations by volunteer participants.

7:45 Shuttle to Beer Sheva.

Wednesday
9-4/5 Excursion to Ramon Crater and Bedouin meal (Hafla).

Evening, about 2 hours after excursion (around 7) Distinguished lecture: Charles Bennett (Quantum information, IBM), Logical depth and the emergence and decay of classical information.

Thursday
8:55 Shuttle from Beer Sheva North (University) train station.

10-11 Edo Liberty, (Yahoo, Research), Data Mining in the Streaming Model; Approximating Massive Matrices.

11:30-12:30 David Gamarnik, (Sloane School, M.I.T.), Hardness results for local algorithms for sparse random graphs.

12:30-2 Lunch

3:30 - 4:30 Short presentations by volunteer participants.
5-9 Neve Midbar Spa night (including dinner).

Friday
10-11 Shlomo Shamai, (EE, Technion), Information Theory: Old and New—A Personal Perspective.
   11:30-12:15 Conclusion (Bachmat)
   12:30 Shuttle to Beer Sheva.